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17 February 1981

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2093

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CONTENTS

CZECHOSLOVAKIA

Briefs
Grain, Potato Imports 1
Consumer Goods Shortages 1
Agricultural Machinery, Equipment Deliveries 1
Electronic Production Boost 1
New Grain Silos 1

HUNGARY

New Strategy of Csepel Works Outlined, Problems Reviewed
(Gyorgy Varga; FIGYELO, 31 Dec 80) 2

Exchange-Rate Policy Compared to International Level
(Lajos Osvath; KULGAZDASAG, Dec 80) 9

Briefs
Crop Growing, 1981 26

POLAND

Crop, Livestock Production Examined
(Zdzislaw Grochowski; ZYCIE GOSPODARCZE, 12 Oct 80) 27

ROMANIA

Economic Development, Increased Prosperity Reviewed, Compared
(Gheorghe Cretoiu; REVISTA ECONOMICA, 26 Dec 80) 36

Provisions of 1981 Budget Explained
(Theodor Stolojan; REVISTA ECONOMICA, 26 Dec 80) 44

Current, Future Energy Policy Reviewed
(Vasile Nitu; REVISTA ECONOMICA, 26 Dec 80) 49

Participation of Maritime Industry in Fulfillment of Export Plan
(Ioan Georgescu; REVISTA ECONOMICA, 12 Dec 80) 54

Delays in Fulfillment of Contracts in Metallurgical Industry
(Gheorghe Deliu Interview; SCINTEIA, 27 Nov 80) 59

New Diesel-Electric Locomotive Produced
(REVISTA ECONOMICA, 5 Dec 80) 64

YUGOSLAVIA

Yugoslav-Chinese Economic Cooperation in 1981
(N. Basic; PRIVREDNI PREGLED, 9 Jan 81) 65

Croatian Foreign Trade Through November 1980
(PRIVREDNI PREGLED, 7 Jan 81) 67

New Gas, Oil Sources in Croatia
(Vjekoslav Subic; PRIVREDNI PREGLED, 14 Jan 81) 70

Kosovo Agricultural Growth Rates for 1981-85
(PRIVREDNI PREGLED, 14 Jan 81) 73

Kosovo Nonmetallic Mineral Production in 1981-85 Period
(Milorad Delibasic; PRIVREDNI PREGLED, 14 Jan 81) 75

CZECHOSLOVAKIA

BRIEFS

GRAIN, POTATO IMPORTS--Due to unfulfilled agricultural plant production plan in 1980, the SSR will have to import from the West 300,000 tons of grain for fodder during 1981. Together with potato imports from France, these imports will amount to about 1 billion foreign currency korunas. According to SSR Deputy Premier and Minister-Chairman of SSR Planning Commission Karol Martinka, current meat consumption of 85-86 kg per person in Slovakia will be maintained "even for the price of grain imports from nonsocialist states." [Bratislava SMENA in Slovak 10 Jan 81 p 3]

CONSUMER GOODS SHORTAGES--Current shortages of certain consumer goods in the SSR should be alleviated in 1981. The plan calls for increased production in 19 categories of shortage goods such as cotton bed linen, cotton terry towels, consumer glass products, meat grinders, skis, sleds, etc. [Bratislava SMENA in Slovak 10 Jan 81 p 3]

AGRICULTURAL MACHINERY, EQUIPMENT DELIVERIES--The SSR agricultural complex will receive during the Seventh Five-Year Plan agricultural equipment and machinery worth Kcs 9.7 billion, of this Kcs 6.85 for direct agricultural operations. Included will be delivery of about 7,500 tractors, 2,400 trucks and 1,000 harvesters. [Bratislava SMENA in Slovak 10 Jan 81 p 3]

ELECTRONIC PRODUCTION BOOST--During the Seventh Five-Year Plan the CSSR electrotechnical industry will increase its production 145 percent. Production of microelectronic elements alone will increase 245.7 percent. [Bratislava PRACA in Slovak 10 Jan 81 p 2]

NEW GRAIN SILOS--According to Eng Frantisek Exner, director general of agricultural supplies and procurement in Prague, his organization expects to procure 5.27 million tons of grain in the Czech Socialist Republic this year. In this year's procurement campaign it is using 10 new grain silos with a total storage capacity of 276,000 tons. The largest of them, built by Polish builders in Milin in Pribram District, has a storage capacity of 66,000 tons. In 1981 it will put on stream five steel silos, each of them for 50,000 tons. The plan for the seventh 5-year period envisages the beginning of construction of 12 more large-capacity silos, which will hold on the aggregate 713,000 tons of grain. [Prague ZEMEDELSKE NOVINY in Czech 29 Nov 80 p 1]

CSO: 2020

NEW STRATEGY OF CSEPEL WORKS OUTLINED, PROBLEMS REVIEWED

Budapest FIGYELO in Hungarian 31 Dec 80 p 5

[Article by Dr Gyorgy Varga: "Self-Analysis and Strategy"]

> [Text] "In our system of planning we must perceive the market effects better than up to now, and must react to them accordingly . . ." (From an interview with Dr Vilmos Garai, published under the title "Planning in Csepel," in the 26 May 1976 issue of FIGYELO.)

The Csepel Iron and Metal Works (Csepel Vas- es Femmuvek; CSM) has prepared a balance of its economic work during the past five years. In a departure from the usual standard method, on this occasion the preparation of the balance was accompanied by thorough self-analysis. Circumstances compelled the managers of CSM to uncover the strong points and weaknesses of their economic activity; this is a prerequisite for preparing a program, an intermediate-range plan, that rests on realistic foundations and will serve to improve the trust's ability to compete.

The 1976-1980 plan of CSM called for an increase of output (based on the value of the gross output) at an average annual rate of 5.4 percent; the foreseeable actual rate of increase will be 8 percent, at a 15-percent reduction in employment. Ruble-denominated export increased nearly 1.5-fold in five years, and nonruble-denominated export doubled. The proportion of products that are of top quality even by international standards increased from 20 percent in 1976, to between 50 and 52 percent. The wage level rose at an average annual rate of 7 percent. During the plan period the CSM spent nearly 8 billion forints on development: nonferrous metallurgy and certain areas in the production of iron casting were modernized, and technological reconstruction was carried out in the production of machine tools and single-design machines, and in the production of bicycles. An entirely new factory was built for the production of modern types of electrodes. Most of these development projects were financed with bank credit and own resources.

Financial Problems

The performance data anticipated at CSM for the five-year period seem favorable. But it is likewise true that the trust's profit on sales (its profitability) is 1.3 percent, below the industrial average. In contrast with the 7.7 billion forints of profit planned, the volume of profit realized in five years will foreseeably be only between 3 and 3.2 billion forints. For 1980 the plan anticipated a profit of 1.9 billion forints, but the actual profit is expected to be about 260 to 300 million forints.

In recent years the trust has been having financial problems. It lost its financial equilibrium, and state measures were necessary to bridge the difficulties.

What is the explanation of the developed situation? The explanation is that the rapid rise of output and sales, and the trust's intensive investment activity were not accompanied by an improvement of economic efficiency, and by competitive ability corresponding to the changing market requirements.

But let us investigate the causes in greater detail! We must mention first of all that the price level of the materials and energy used by CSM rose at a substantially faster rate than the price level of its produced output. Therefore the trust's "terms of trade" worsened significantly. An analysis of this worsening of the "terms of trade" will be edifying for other domestic enterprises. The point in question is not that the products produced by CSM's enterprises were judged unfavorably on the market because of their inferior quality. A proportion of CSM's export--for example, electrodes or copper wire--matches in quality and technological level the products of the leading competitors, while the rest of the export meets the average specifications.

The causes of the problems are complex. During the plan period there appeared many factors that influenced the trust's economic processes unfavorably. Such factors were, among others, the already mentioned significant difference between the faster rate of rise of material and energy costs, and the slower rate of rise of product prices, as well as the series of exchange-rate reductions.

All these developments wrought a change in the external conditions of economic activity, a change that the trust did not, and partially could not, foresee, and which it was unable to offset at the given quality of management and at the given technical and organizational efficiency. Perhaps we might mention here that economic regulation is not sufficiently flexible to take into account the additional start-up and market-development costs of investment projects, particularly of large-scale projects.

However, mention must be made also of the shortcomings in management that have plagued the trust also in the past.

In the economic justification of the applications for investment credit, the trust relied on foreign-trade information that proved incorrect in practice. (For example, the world-market price of electrodes was forecast at 860 dollars per ton, whereas the actual price can be expected to be around 600 dollars.)

Different lessons may be drawn in the case of copper wire. After the plant's start-up, even with this product of high quality we were able to penetrate the market only as a result of intensified effort over a one-year period, with significant loss of time and dropout of income.

As evident also from the above examples, the trust's financial difficulties were caused in no small extent by shortcomings in marketing and pricing. For this reason the market forecasts proved incorrect even in the case of products that were classified as "strategic" products. Presumably sufficient importance was not attached to market criteria.

But let us examine the further explanations. In 1975, after lengthy debate, the unprofitable production of motorcycles was discontinued, and a changeover was made to the production of bicycles. But so far, regrettably, this undertaking has not proved profitable. Under the present conditions, the production and export of bicycles are showing a loss of about 400 million forints, even though bicycles are much in demand on the world market. The loss is partially a result of the rising cost of parts and subassemblies supplied by other domestic producers, and of the relatively high proportion of import incorporated in the bicycles. I say partially, because a role in this loss is played also by the fact that inefficient organization and low capacity utilization were long characteristic of bicycle production. The proportion of rejects was relatively high. This, too, contributed to the fact that the production cost of bicycles is high and cannot be passed on in the export prices.

In addition to all this (or rather, after all this) we may question also the soundness of the development concept: the development of a product containing a high proportion of materials and a small proportion of value added was begun at a time when on the world market primarily those products are appreciating that are based on skilled labor and satisfy special demands.

It appears that greater selectivity with regard to the production structure would have been more expedient, even if this would have meant a slower increase in output. Presumably this would have eased the economic burden on CSM.

Mention must be made also of the fact that the quality of management within the trust did not keep pace with the requirements. An indication of this is the unsuitable substantiation of the costing of the products: the total cost that can be allocated to a product is not known exactly, and the system of cost accounting is not sufficiently reliable. Internal prices differing from the market prices confuse the economic picture. For years the inventories increased at a faster rate than the output.

A cumbersome and steep management pyramid also played a role in the accumulation of economic difficulties and the weakening of adaptability.

For the sake of objectivity we must admit that the changes on external markets presented also unpleasant "surprises" that were unforeseeable, but these may be classified as common risks. Nor can we disregard the tightening of the economic regulators, which drained the trust's profits time and again. Finally, the trust makes also unprofitable or low-profit products whose production must be maintained in the interest of the national economy.

CSM had been in financial difficulties also in the early 1970s. In 1976, at the start of the five-year plan, however, the trust regained its financial equilibrium. But the following year it had to dip into its reserve fund; in 1978 its financial situation became grave. This trend was halted in 1979, primarily as a result of inventory management. And a turn-around occurred in 1980. This turn-around is evident in that the rise in inventories ceased, wages were raised from own resources, and work is more efficient and more disciplined also in other areas of management. Despite the changes in prices and regulators during the year, the trust is expected to achieve the 260-300 million forint profit planned for 1980.

But the fact remains that the trust is not in a position to form incentive funds. Allotments to the profit-sharing fund have been curtailed since 1978, and no profit-sharing fund was formed in 1980. (I wish to note that cessation of the opportunity to form a profit-sharing fund means that the rise in personal incomes, on average for the five-year period, will be less than the 5 percent planned, despite the 7-percent rise of the wage level.)

Plan to Restore Equilibrium

The state has provided help to bridge the trust's financial difficulties: ATB [State Planning Commission] has agreed to let the Hungarian National Bank suspend until 1982 the servicing of the trust's loans and permit certain payments at the expense of the reserve fund (the trust may obtain credit to advance circulating capital, etc.). Simultaneously the trust had to prepare a program of the measures by which it intends to restore financial equilibrium. This program is also an important part of the five-year plan.

Restoration of financial equilibrium, higher profitability, and higher personal incomes and better living conditions for the trust's employees are in the forefront of attention in CSM's five-year plan and its plan of measures.

On this occasion planning seems to have taken the realities into account far better, particularly the fact that in the coming years CSM will be able to rely only on its own resources. Accordingly, the targeted average rate of increase in output for 1981-1985 is 4 percent a year, substantially lower than the average annual rate of increase for the preceding five years. Within this 4-percent rise, the increase in the output of engineering products will exceed 7 percent. The output of ferrous metallurgy will increase by 1.5 to 2 percent a year, after the curtailment and increasing phase-out of unprofitable production. Thus the shares of engineering and nonferrous metallurgy will increase within the output of CSM, and share of ferrous metallurgy will decline. The share of competitive strategic products--drills, N/C machines, equipment for pipe mills and rolling mills, and fine metallurgy products--will be increased further.

The production of about 1.5 billion forints' worth of unprofitable products will be discontinued. It is planned to liquidate the loss on bicycle production, by discontinuing unprofitable export, and by replacing the foreign suppliers of parts and subassemblies with domestic ones. I wish to note that liquidation of the export loss will foreseeably exceed the rise of the unit cost due to a reduction of the production volume, but in the long run this can hardly ensure the profitability of these products (unless other, profitable products can replace the dropout in production volume). In view of what has been said above about the development of bicycle production and the utilization of new capacities, a further reduction of the production volume could rule out in advance a return on invested capital.

The five-year plan earmarks about 70 percent of the increase in CSM output for the expansion of nonruble-denominated export.

An important role has been assigned to the improvement of management. In inventory management, for example, the objective is to allow only a 0.3-percent increase in inventories for every 1.0-percent rise in output. The proportion of materials within the trust's output is very high: about 70 percent. Therefore a plan of measures has been drafted to prepare norms for the consumption of materials or energy, or to update the existing norms.

The trust expects to reduce the number of blue-collar workers by about 10 percent; and the number of white-collar workers, by 15 percent. This will require more careful organization at the workplace than up to now.

The trust cannot expect any large-scale investments under the Sixth Five-Year Plan, and therefore closer attention will be devoted to the better utilization of highly productive and valuable fixed capital, to technological organization, and to scrapping equipment that has already been written off entirely.

According to preliminary estimates, the trust will raise the wage level at an average rate of 4 to 5 percent a year, but it will be unable to raise the wage level through profit-sharing. By 1985 the trust intends to increase the rate of its profit on sales to 5.4 percent, and its profit to 1.4 billion forints. I wish to emphasize that these targets do not anticipate any returns on significant outside resources, hence on further investments.

Changes in System of Incentives

It will be worthwhile to discuss in greater detail the efforts to improve the quality of marketing and pricing.

Essentially we revert to the interview excerpt selected as the motto for this article. It appears that on this occasion the trust has adopted and is adopting an entire series of measures to improve the quality of marketing and pricing. The measures are based on the realization that the market is the start and finish of every development. Development and production must be subrodinated to business interests and the market demand. It is the task of the trust's Commercial Department to formulate the principles of business policy, to set marketing and inventory policies, and to develop marketing strategies. An important role is assigned to pricing, which now is an integral part of active marketing. The conditions must be ensured for the trust to gather and analyze its own pricing information, and eventually to prepare its own forecasts.

In the interest of responding more flexibly to market demands and effects, profound changes are being made in the trust's internal organization and system of incentives. (Pursuant to a resolution of the State Planning Commission, the enterprises that can operate more effectively outside the trust, whose development can better be ensured independently, and whose technological and production links to the other enterprises of the trust are not decisive, must be made independent. In this manner the Telecommunications Equipment Factory ((Hiradastechnikai Gepgyar)) and Qualital will be split off as of 1 January 1981.)

For the purpose of organizational concentration and technological integration, there will be several integrations and organizational mergers within the trust as of 1 January 1981. Among others, the Steel Works (Acelmu) and Pipe Mill (Csogyar) will be merged. This will result in a vertical integration of ferrous metallurgy, with better organized and more effective management of production, marketing and inventories. A merger of the CSM Service Enterprise (Szolgaltato Vallalat) and of the Institute for Trading in Materials and Capital Goods (Anyag- es Termeloeszkoz-Kereskedelmi Intezet) will streamline procurement and inventory management.

Depending on the Profit

A significant change is that the independence and entrepreneurial willingness of the trust's enterprises are being increased. To this end the competence of the trust's headquarters and enterprises has been reviewed, and a significant proportion of the functions, particularly in adminstration, that were centralized earlier will now be decentralized, parallel with upgrading the quality of management and reinforcing the strategic functions of the trust's headquarters. One objective of decentralization is to form a flatter management pyramid and a shorter chain of command. The point is not merely a reduction of personnel, but the elimination of duplications and of jobs and functions that have proved to be superfluous.

As a result of the organizational changes, the number of organizations at headquarters will be reduced to 35, from 40 at present. Within CSM as a whole, the number of directors, deputy directors and department chiefs will be reduced by about 22 percent; and the number of section heads, by about 27 percent. Simultaneously there will be qualitative changes in management positions.

As of next year, the trust's enterprises will be exposed more directly to the effects of government economic regulation. Which means that the success of their activity will be linked more directly to the amount of profit they earn. Market prices will apply within the trust; the transfer prices will be abolished that obscure the economic picture, undermine enterprise self-interest and serve to regroup profit.

Regulation of wages and personal incomes will be linked more closely to enterprise profitability and to the development of profits.

As evident also from this brief outline, CSM is undergoing a period of profound changes. Even if not all changes of the new strategy seem convincing at present, in relation to the qualitative factors it can be said that the Csepel Works offers promise of more comprehensive and more profound development than up to now, although at a slower growth rate.

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EXCHANGE-RATE POLICY COMPARED TO INTERNATIONAL LEVEL

Budapest KULGAZDASAG in Hungarian No 12, Dec 80, pp 21-23

[Article by Lajos Osvath, director of the Economics Research Institute: "Our Exchange-Rate Policy in 1968-1979, in the Light of International Comparisons"]

[Text] In the author's opinion, an exchange-policy of upward revaluation is required under the Sixth Five-Year Plan. A further relative devaluation of Hungarian live labor can be avoided, respectively its desirable upward revaluation can be achieved, only by reducing, systematically and under central control, the producer price level, and in conjunction with it also the exchange rate. The causes of the disadvantageous situation of Hungarian export to capitalist markets do not lie primarily in the peculiarities of our price system, system of taxation and system or pricing, rather in the discriminatory measures of the capitalist countries. At the same time it is necessary to analyze more thoroughly the real reason why the competitive advantage of relatively low wage costs does not assert itself in our export.

In the November issue the editors published an article by Gabor Oblath on this question. The present article partially arrives at conflicting conclusions and partially approaches the problem from a different aspect. Since this is a very important topic and in the forefront of attention, the editors will be pleased to publish also further contributions and analyses.

The period 1968-1979 is characterized by the reform of the system for managing the economy, by significant changes in the external conditions of economic activity, and by a reordering of priorities in economic policy. I will not dwell on these generally known questions and merely wish to confine myself to establishing that the concept of exchange-rate policy remained unchanged, despite the altered foreign and domestic conditions. The economy's management did not respond with the instruments of exchange-rate policy to the changes that occurred.

Changes of Exchange Rate

The foreign-trade price multipliers introduced at the start of the new system for managing the economy were set at 60 forints per dollar and 40 forints per ruble, based on the indicators of foreign-exchange earnings calculated at the producer prices. In a departure from the preliminary computations, the dollar's foreign-trade price multiplier did not attain the average level of foreign-exchange earnings for the economy as a whole; it proved to be about 10 to 15 percent lower than this level. Consequently, an extensive system of refunds, encompassing the major proportion of export, was linked to the price multiplier.

The Central Committee resolution on the economic mechanism's reform presumed that the scope and extent of state refunds would gradually narrow as the efficiency of export improved, that the costs of earning foreign exchange would show a declining trend. This process was supposed to result first in the elimination of the difference between the price multiplier and the average cost level of earning foreign exchange, and subsequently in the price multiplier's movement in the direction of the marginal cost level of earning foreign exchange. In this way the price multiplier would also have become more uniform as the system of refunds was gradually dismantled, since an ever greater proportion of export would have been conducted without refunds, using the uniform price multiplier.

Amidst the changes in the world economy that were characteristic of the investigated period, particularly of its second half, we failed to achieve the improvement in export efficiency that was to have been the foundation for the complete liquidation of state refunds, and thereby for making the price multiplier more uniform, and for developing it in the direction of the exchange rate. This task was left for the period of the Sixth Five-Year Plan. In retrospect it is difficult to evaluate how much better the results would have been with a stricter exchange-rate policy. For example, a degressive awarding of state refunds--the economic mechanism's reform set this as one of its objectives, and we did pursue it in the first years, but it was left out from the instruments of regulation under the Fifth Five-Year Plan--would probably have developed the commodity structure of export more selectively.

The processes that have taken place in the world economy since 1973 make it difficult to evaluate the changes in the exchange rate's level. In the years prior to 1973, the annual rise of the foreign-trade price level barely exceeded 2 percent. The rise in the price level of nonruble-denominated import already reached 16.5 percent in 1973, and 39.5 percent in 1974. In 1979, the import-price level, computed in forints, was nearly 180 percent of its level eight years earlier. Measured in dollars, the rise was significantly greater.

The dollar's price multiplier remained unchanged from 1968 through 1971. It was modified for the first time in 1972. During the past eight years or so, the dollar's commercial exchange rate in forints dropped to nearly one-half; in other words, the forint was revalued upward significantly in relation to the dollar. It is common knowledge that not only Hungary but also most of the developed capitalist countries revalued upward their national currencies in relation to the dollar. Among 14 countries there were only three whose currencies dropped in relation to the dollar; eleven countries revalued their currencies upward, most of them significantly.

Table 1. Changes From 1970 to 1978 in the Exchange Rates of National Currencies in Relation to the Dollar (1970 = 100)

Switzerland	246.4	Denmark	135.2
Federal Rep. of Germany	182.6	Norway	136.4
Austria	179.3	France	123.3
Japan	172.6	Sweden	114.6
Netherlands	167.6	Canada	94.2
Belgium	159.0	United Kingdom	80.0
Hungary	158.3	Italy	73.7

The question arises whether the extent of the forint's upward revaluation is adequate, excessive, or inadequate; in other words, has the real value of the forint remained unchanged, has it been revalued upward or has it been devalued. This question requires an answer also because the view is widespread that we revalued the forint upward vigorously (and forcibly), thereby violating the basic principles of exchange-rate policy and weakening the incentive to export.

Changes in the Forint's Real Value

Changes in the real value of the forint's exchange rate can be measured the most reliably by the method of computation that is based on purchasing power parity. The traditional theory of purchasing power parity attempted to determine the exchange rate's expedient level by comparing the changes in the individual countries' domestic (producer or wholesale) price levels. Thus if the domestic price level of country A rose faster than that of country B, then the currency of country A had to be devalued in relation to the currency of country B. The assumption behind this is that changes in the exchange rates offset in the long run the differences between the national rates of inflation. Most experts, including a recently prepared Common Market study (OPTICA report, 1977), recommend a comparison of the wholesale price indices to evaluate the development of exchange rates, and the mentioned report even recommends that the EEC members set their exchange rates on this basis.

Many writers have critcized the theory, and practical computations often contradict it. The exchange-rate computations, for example, showed that by 1978 the individual countries revalued their currencies, but not to the extent warranted by the differences in the national rates of inflation (manufacturing price, wholesale price indices). Unquestionably one shortcoming of the theory is that it does not take adequately into account the fact that a change of the world-market price level affects individual countries differently, due to differences in their export or import structure, and consequently the exchange rates cannot be modified merely on the basis of a comparison of the domestic price levels.

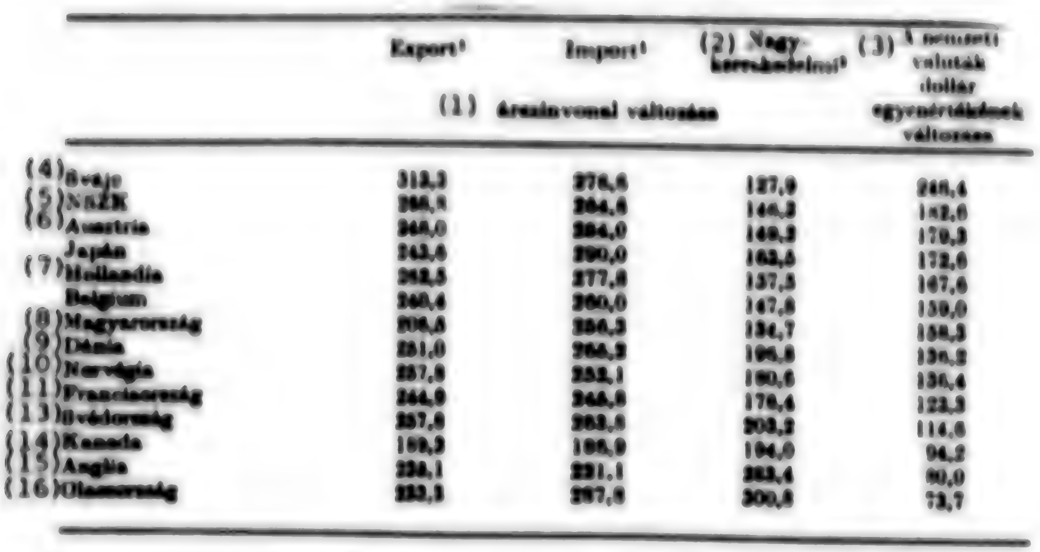
However, an even greater role in the development of the discrepancy was played by the fact that the dollar, calculated on the basis of a basket of currencies, underwent a sharp devaluation, even though the changes in the wholesale price level between 1970 and 1978 would have warranted leaving the exchange rate unchanged. This devaluation was caused basically by factors that date back to before 1970 (for example, at the time of the capitalist monetary system's reorganization after World War II the dollar was intentionally overvalued). In view of the fact that the sharp relative upward revaluation in Switzerland, Japan, Austria, the Federal Republic of Germany, Denmark, and the Netherlands is mostly offset by the relative devaluation in the United States (in addition to the United States, only Canada and Italy devalued their currencies significantly), it is only natural that the exchange-rate movements cannot be explained by the developments between 1970 and 1978. Despite the mentioned reservations, we calculated the pertinent series of data also for Hungary, using estimates. The result shows a 4.7-percent relative devaluation of the forint.

A more reliable result can be obtained by applying the theory of purchasing power parity to a different method of analysis. Here again we start out from the fact that the change in the value of currencies is determined by the change in the price level of the commodity trade transacted in the given currencies. The value of the national currency of country A will change in direct proportion to the change in its domestic (producer or wholesale) price level; and the value of foreign currencies, from the viewpoint of country A, will change in inverse proportion to the price level of the import of country A, measured in foreign exchange. In its exchange-rate policy a country follows the changes in the value ratio of its domestic currency to foreign currencies if and when it revalues its currency upward or downward in accordance with the difference between the change in the domestic price level and the change in the import price level. (For use in further analyses, Tables 2 and 3 also contain data characterizing the changes in the export price level and in the terms of trade.)

We obtain an economically meaningful picture of how the exchange rates followed the changes of the import price level. Due to Switzerland's peculiar situation, the Swiss franc underwent a sharp upward revaluation. The exchange rates of the currencies of nine countries--the intermediate group in the table--changed, with minor deviations, essentially to the extent warranted by the change of the import price level. The currencies of six countries, including Hungary, underwent sharp devaluation.

There is an obvious correlation between a country's economic position and the development of its exchange rate. The upward revaluation of the currencies of the so-called strong countries is sharp even in the relative interpretation outlined above, whereas the currencies of countries coping with economic problems tended to undergo devaluation in real terms. In this respect Hungary's exchange-rate policy followed the international trends. In the case of countries whose terms of trade worsened considerably, the exchange rates of their currencies developed practically always within the limits warranted by the changes in the export and import price

Table 2. Development of the Foreign and Domestic Price Levels, and of the Exchange Rates in 1970-1978 (1970 = 100)



	Export[1]	Import[1]	(2) Nagykereskedelmi[2]	(3) A nemzeti valuták dollár egyenértékének változása
	(1) Árszínvonal változása			
(4) Svájc	312,3	276,6	127,9	248,4
(5) NSZK	285,5	284,6	146,2	182,6
(6) Ausztria	268,0	284,0	149,2	179,3
Japán	242,6	290,0	162,5	172,6
(7) Hollandia	262,5	277,8	137,5	167,6
Belgium	260,4	260,0	147,8	159,0
(8) Magyarország	206,5	256,3	134,7	158,3
(9) Dánia	231,0	264,3	195,8	136,2
(10) Norvégia	257,8	252,1	190,6	136,4
(11) Franciaország	244,9	266,6	179,4	123,3
(13) Svédország	237,8	283,5	202,2	114,6
(14) Kanada	189,3	198,9	194,0	94,2
(15) Anglia	228,1	231,1	283,4	90,0
(16) Olaszország	233,3	287,8	300,8	73,7

Source: "International Financial Statistics Yearbook, 1979."

[1] Change of export and import price levels in terms of dollars.

[2] Occasionally the producer or industry transfer price indices.

Key:

1.	Change of price level	8.	Hungary
2.	Wholesale	9.	Denmark
3.	Change of national currencies' dollar equivalent	10.	Norway
		11.	France
4.	Switzerland	13.	Sweden
5.	Federal Republic of Germany	14.	Canada
6.	Austria	15.	United Kingdom
7.	Netherlands	16.	Italy

levels, in such a way that these countries, by modifying their exchange rates, tended to offset only the rise of the export price level, but not the greater rise of the import price level.

The producer forint's devaluation (as a result of a 1.5-percent rise in industry's producer price level, and of a 16-percent rise of the import price level) continued in 1979. Protection of the domestic price level under such an exchange-rate policy required extensive use of the various forms of price subsidy.

To the question we have raised we may formulate our answer as follows: In relation to the dollar, the forint was not revalued upward to the extent warranted by the difference between the rise of the foreign and domestic price levels, and consequently the forint underwent a relative devaluation.

Table 3. Interrelations of the Exchange Rate, Foreign Price Level and Domestic Price Level in 1970-1978

	(1) Az árfolyamváltozás mutatója az import árszínvonal alapján	(1) Az árfolyamváltozás mutatója az export árszínvonal alapján	(2) Cserearánymutató
(3) Svájc	1,14	1,10	113,3
(4) Ausztria	1,06	1,08	97,6
(5) Anglia	1,03	0,98	106,3
(6) Dánia	1,09	1,07	94,6
(7) NSZK	0,99	0,99	101,6
(8) Norvégia	0,98	0,96	102,3
Japán	0,97	1,16	84,0
(9) Kanada	0,98	0,97	101,3
(10) Hollandia	0,96	1,00	94,5
(11) Görögország	0,93	1,13	82,1
Belgium	0,90	0,98	92,5
(12) Franciaország	0,88	0,89	99,6
(13) Svédország	0,88	0,90	97,7
(14) Spanyolország	0,85	1,06	80,2
(15) Magyarország	0,83	1,03	80,6
(16) Olaszország	0,77	0,95	81,1

Comment: To compute the indicator we divided the wholesale price index by the product of the export or import price index and the change of the exchange rate. If the indicator is greater than 1.0, then the given country's currency was revalued by more than the difference between the rise of the foreign and the domestic price level. But if the indicator is less than 1.0, then upward revaluation did not attain this level.

Key:

1. Indicator of exchange rate's change on the basis of the import/export price level
2. Terms of trade
3. Switzerland
4. Austria
5. United Kingdom
6. Denmark
7. Federal Republic of Germany
8. Norway
9. Canada
10. Netherlands
11. Greece
12. France
13. Sweden
14. Spain
15. Hungary
16. Italy

This devaluation became pronounced particularly in 1979. Relative devaluation was characteristic also of the countries with weakly or moderately developed economies whose terms of trade worsened significantly.

Exchange Rate and Wage Costs

Our further investigations, however, reveal significant differences between Hungarian exchange-rate policy and the exchange-rate policies of countries whose behavior is of the same type as ours.

Table 4. Cost Structure of Industrial Production (in percent)

		1968	1976–78	1980
(1)	Anyag- és anyagjellegű költség	74	77,6	81,1
(2)	Bérek, személyi jövedelmek, bérjellegű költségek	16	13,6	12,6
(3)	Amortizáció	4	4,4	4,3
(4)	Eszközlekötési járulék és egyéb költség	6	4,4	2,0
		100	100,0	100,0

Source: Bela Csikos Nagy, "A Magyar Arpolitika" (Hungarian Price Policy), Publishing House for Economics and Law, Budapest, 1980.

Key:

1. Materials and materials-related costs
2. Wages, personal incomes, wage-commensurate charges
3. Depreciation
4. Capital use charge and other costs

--A characteristic feature of our system of exchange rates is that the commercial exchange rate (price multiplier) is substantially higher than the noncommercial exchange rate. The diversity of the two exchange rates is warranted by the differences, in terms of international comparison, in the producer price level and consumer price level: in comparison with other countries, our consumer price level is low, while our producer price level is high. Consequently, the consumer forint is "harder" than the producer forint. This relative hardness of the consumer forint in relation to the producer forint is one reason why the expenditure of live labor is undervalued in our producer price system. (Calculated on the basis of the price multiplier, average hourly earnings in 1970 were 4.5 times higher in Austria and more than 4.0 times higher in France than the hourly wages paid in Hungary. At the noncommercial exchange rate the corresponding index numbers are 225 for Austria and 210 for France; the differences are even smaller if based on actual purchasing power.)

--As this follows also from the preceding, the proportion of wages and wage-commensurate charges is very low within the cost structure of industry.

--In all of the investigated countries, the rise of the average wage level exceeded the rise of the producer (wholesale) price level.

In the case of Sweden, the United Kingdom, and Canada among the investigated countries we obtained lower ratios [of the rise in the wage level to the rise of the producer (wholesale) price level] than our ratio. In the case of the Federal Republic of Germany and Switzerland, where the wage levels were very high already in the base period, the ratios were close to ours. Upward revaluation was much sharped in all the other countries.

Table 5. Changes in the Valuation of the Use of Live Labor Between 1970 and 1978 (1970 = 100)

	I. Bérszínvonal növekedése	II. Nagykereskedelmi- (ipari, termelői) árszínvonal növekedése	I/II.
(1) Ausztria	304,7	194,2	1,57
Belgium	362,7	147,8	2,45
(2) Dánia	290,4	196,8	1,48
(3) Franciaország	304,7	176,4	1,73
(4) Hollandia	280,0	187,5	1,50
(5) NSZK	192,9	146,2	1,32
(6) Norvégia	275,0	180,6	1,52
(7) Olaszország	462,0	300,8	1,53
(8) Svédország	232,2	203,2	1,14
(9) Svájc	171,3	127,9	1,34
(10) Anglia	302,6	282,4	1,07
Japán	300,6	163,6	1,84
(11) Kanada	227,3	194,0	1,17
(12) Magyarország	175,2	134,7	1,30

Key:

I. Rise of wage level
II. Rise of wholesale (industry transfer, producer) price level
1. Austria
2. Denmark
3. France
4. Netherlands
5. Federal Republic of Germany
6. Norway
7. Italy
8. Sweden
9. Switzerland
10. United Kingdom
11. Canada
12. Hungary

--By international comparisons, the expenditure of live labor in Hungary was undervalued already at the time of the economic mechanism's reform, and this undervaluation increased further during the investigated period. A faster rise of the wage level than of the wholesale (or industrial producer) price level is characteristic also of the countries that devalued their currencies in relation to the dollar. Let us investigate more closely the data of Austria (which revalued its currency upward), of Italy (which devalued its currency), and of Hungary.

In Austria the extent of the import price level's rise was the same as in Hungary. As a result of the schilling's sharper upward revaluation, in terms of national currency the rise of the import price level is smaller in Austria than in Hungary. The rise of the wholesale (producer) price level slightly exceeds the rise of the import price level in Austria, but lags significantly behind it in Hungary. (We may assume that in Austria the ripple effects of higher import prices spread more completely into the domestic prices, and at the same time the domestic price level was boosted also

Table 6. Changes of Price Level and Wage Level Between 1970 and 1978 (1970 = 100)

	(1) Ausztria	(2) Olaszország	(3) Magyarország
(4) Az import árszínvonal változása, dollárban számítva	254,0	287,8	250,3
(5) Az import árszínvonal változása, nemzeti valutában	141,7	390,5	161,9
(6) Nagykereskedelmi (termelői) árszínvonal-változás	149,2	300,8	134,7
(7) Bérszínvonal-változás	234,7	462,0	175,2
(8) Bérszínvonal-változás dollárban mérve	420,8	340,5	277,3

Key:

1. Austria
2. Italy
3. Hungary
4. Change of import price level, in dollars
5. Change of import price level, in national currency
6. Change of wholesale (producer) price level
7. Change of wage level
8. Change of wage level, in dollars

by the sharper rise of wage costs.) In all three countries the rise of the wage level exceeded the rise of the wholesale price level. The corresponding ratios are as follows: Austria - 234.7/149.2 = 1.57; Italy - 462.0/300.8 = 1.54; and Hungary - 175.2/134.7 = 1.30.

The ratios of the rise of the wage level to the rise of the import price level in terms of national currency are as follows: Austria - 234.7/141.7 = 1.66; Italy - 462.0/390.5 = 1.18; and Hungary - 175.2/161.9 = 1.08.

It can be established that exchange-rate policy and wage policy in Austria and Italy demanded a sharp rise in the efficiency of using live labor, whereas in the case of Hungary this requirement was significantly smaller.

Let us examine how the valuation of the expenditure of live labor changed in the individual countries as the combined effect of exchange-rate policy and wage policy (1970 = 100): Begluim, 222; Japan, 179; Austria, 166; Switzerland, 153; France, 153; Norway, 149; Denmark, 149; the Netherlands, 142; the Federal Republic of Germany, 133; Italy, 118; Canada, 115; United Kingdom, 110; Hungary, 108; and Sweden, 101.

The computations unambiguously show a sharp relative (i.e., in the sense of international comparisons) worsening of the valuation of the expenditure of live labor in Hungary.

The problem arising from the low valuation of the expenditure of live labor already at the start, and from its relative worsening during the investigated period, is further aggravated by the system of state refunds, as a result of which the valuation of live labor in export is even less favorable than outlined above. The demonstrable differences in productivity do not warrant such a difference in the levels of wage costs, nor can the ratios of real wages differ so widely. The worsening of our relative wage situation from 1970 to 1978 cannot be attributed to skyrocketing prices on the world market, nor to the worsening of our terms of trade. Indeed, the skyrocketing prices of raw materials affected most of the investigated Western European countries in the same way as they did Hungary, nor are we the only country whose terms of trade worsened.

In principle, the fact that wage costs in Hungary are much lower than the wages paid by enterprises in capitalist countries should give us a comparative advantage in export, and this should be reflected in our convincing ability to compete.

Economic Efficiency of Export

The economic efficiency of export is unfavorable for a wide circle of exports and to a large extent, particularly in terms of the cost per value added as a realistic measure of production performance. The anticipated comparative advantage of low wage costs does not assert itself in competition on the world market.

We must gain acceptance of our costs on foreign markets under conditions characterized by various modes of discrimination, ranging from the overt to the less visible, and partially as a result of this the export prices we are able to attain on foreign markets are "depressed" in comparison with the prices charged by capitalist suppliers. A duty of 11 to 13 percent is levied on our finished products exported to the developed capitalist countries. Within this the duty is 15 to 20 percent on our textiles, and 5 to 10 percent on our engineering products. The duty on our agricultural exports ranges from 14 to 20 percent; and on our semifinished products, from 6 to 8 percent. In addition to the numerically verifiable burden of import duties, there are also numerous other factors which result in our export prices being lower than the prices of our capitalist partners. Some of these factors may be regarded as price concessions that we must make to induce the importers to buy from us. The rate of these price concessions depends on many factors and can only be estimated at best. According to various investigations at the product level, this rate may range from 3 to 10 percent.

It would be important to investigate where and how great a role the de jure and de facto discriminative marketing conditions play in the low economic efficiency of our export. Another important area of investigation is where and to what extent the economic efficiency of export could be improved through better adjustment to market conditions. Under the outlined undervaluation of live labor and industry's given cost structure, even a slight increase in sales prices could permit a significant upward revaluation of live labor.

The peculiarities of our price, tax and costing systems also play a certain role in the development of this unfavorable picture. The view has gained general acceptance that practically all of society's net income is contained in the producer prices, while consumer prices are kept at a low level. This is in contrast with the developed capitalist countries that trade with us: there the greater proportion of society's net income is realized in products for final demand, and at the same time export is exempt from the net turnover tax on domestic sales. This question, however, requires further detailed investigation, with special attention to the new producer price system introduced as of 1 January 1980, and to the related changes in the system of taxation.

Of the elements of net income realized in the producer prices, the capital use charge has been abolished, and the production tax and wage-commensurate charges have been sharply reduced. The reduction is 94.2 billion forints, which is 51.2 percent of the transfers of revenue to the state budget other than profit tax (183.7 billion forints in 1979). All this can significantly alter the views that we have held up to now.

Conclusions Regarding Exchange-Rate Policy

In the capitalist countries the requirements of efficiency have increased most sharply with respect to the expenditure of live labor. This logically follows from the fact that they, too, are able to offset the disadvantageous changes on the world market only by making more efficient the production of added value.

I regard as the greatest contradiction of our entire system of regulation the fact that while we are striving to assert by every means the effects and value judgments of the world market, we are artificially maintaining at a low level the costs of using live labor. The new producer-price system has abolished concealed subsidization of manufacturing through excessively low domestic prices for sources of energy and basic materials; but the undervaluation of the use of live labor is still a source of such subsidization even today. Consequently, we need an exchange-rate policy and producer-price policy that will gradually resolve the undervaluation of the use of live labor, ending the situation that labor costs are a nearly negligible factor in the cost structure of production.

An exchange-rate policy that devalues the forint cannot serve to revalue upward the use of live labor. The forint's further devaluation would result in another easening of the efficiency requirements placed on live labor. In our exchange-rate policy, then, we must strive at least to preserve the forint's real value (and preferably for the forint's real upward revaluation that exceeds the difference between the import price level and the domestic price level).

Under the Sixth Five-Year Plan we cannot expect a significant difference in the rates of change in the producer prices and wage level. In the capitalist countries, however, the upward revaluation of live labor will presumably continue, as a result of which the relative undervaluation of

Table 7. Change of Net Income Included in the Prices, Due to Price and Tax Regulation

		(1) Az 1979. évi	(2) Az 1980. évi	(3) A tiszta jövedelem növekedése	(4) A tiszta jövedelem csökkenése
		árak és pénzügyi szabályozók alapján (tiszta jövedelem +; támogatás –)		az ár- és pénzügyi rendezéskor	
(5)	I. Tiszta jövedelem a termelői árakban				
(6)	Bérjárulék	50,5	40,2		10,3
(7)	Eszközlekötési járulék	30,9			30,9
(8)	Termelési, kereskedelmi, egyéb adó	53,4	4,8		48,6
(9)	Egyéb vállalati befizetések	14,9	20,0	5,1	
(10)	Különbözeti termelői forgalmi adó	—	57,8	57,8	—
(11)	Vám és import forgalmi adó	27,5	23,1		4,4
(12)	Exportadó	6,5	7,9	1,4	
(13)	Nyereség	167,0	161,6		3,4
(14)	Termelői árkiegészítés, dotáció, egyéb támogatás	—42,3	—34,1	8,2	
(15)	Import árkiegészítés	—12,8	—5,1	7,7	
(16)	Különbözeti termelői forgalmi visszatérítés		—15,3		15,3
(17)	Termelés korszerűsítési támogatás	—28,5	—22,4	12,9	6,8
(18)	Árkülönbözeti tartalékalapok támogatása	—4,7		4,7	
(19)	I. Összesen	262,4	238,5	97,8	121,7
(20)	II. Tiszta jövedelem a fogyasztói árakban				
(21)	Forgalmi adó	41,5	65,8	24,3	
(22)	Fogyasztói árkiegészítés	—43,9	—50,6		6,7
(23)	II. Összesen	—2,4	15,2	24,3	6,7
(24)	III. Tiszta jövedelem összesen (I+II)	260,0	253,7	122,1	128,4

Source: Bela Csikos Nagy, "A Magyar Arpolitika," Publishing House for Economics and Law, Budapest, 1980.

Key:

1. On the basis of the 1979
2. On the basis of the 1980 prices and financial regulators (net income +; subsidy -)
3. Increase
4. Decrease of net income at the time of price and financial regulation
5. I. Net Income in producer prices
6. Wage-commensurate charges
7. Capital use charge
8. Production tax, trade tax, other taxes
9. Other payments by enterprises
10. Differential compromise turnover tax

(Key to Table 7, continued)

11. Customs duty and import turnover tax
12. Export tax
13. Profit
14. Producer-price subsidies grants, other aid
15. Import-price subsidies
16. Refund of differential compromise turnover tax
17. Aid for production modernization
18. Subsidies for price reserve funds
19. I jointly
20. II. Net income in consumer prices
21. Turnover tax
22. Consumer-price subsidies
23. II. jointly
24. III. Total net income (I plus II)

live labor in Hungary will increase. Under these circumstances the desirable upward revaluation of the use of live labor can be achieved only through systematic reduction of the producer price level. In a socialist economy the conditions for this are given.

From the preceding it follows that three kinds of change in the exchange rate are fesible: (1) A change of the exchange rate that follows the modifications of the capitalist currencies' value ratios on the money markets, without altering the value ratio between the basket of currencies and the forint. (2) A change of the exchange rate that offsets the difference between the change of the foreign prices and the change of the domestic producer prices, i.e., the exchange rate will decline if the foreign prices rise faster than the domestic producer prices, and the exchange rate will rise if the direction of price movement is the opposite. (3) A change of the exchange rate that would result from a "strengthening or hardening" of the producer forint, in such a way that--preferably once a year, within the framework of the regulators' general adjustment--the producer prices (and everything else expressed in producer forints: fixed capital, depreciation, assets and liabilities, exchange rates) would be multiplied by a coefficient of less than 1.0, commensurately with the foreseeable improvement in efficiency. For every enterprise this operation makes the production input cheaper by as much as the output becomes cheaper. Thus the burden on the enterprises is evident in that in their cost management they must achieve savings equal to the corresponding percentage of the price level's general reduction.

This method is more advantageous than the forint's upward revaluation at a rate exceeding the rise in export prices. The method sets a requirement for the economy as a whole, and not merely for the exporting economy; it is effective also where the price-reducing effect of upward revaluation collides with the price inelasticity of the given product or service; and it does not trigger automatically the need to increase state refunds. In addition--with the inclusion of a turnover tax corresponding to the reduction of the producer price level--the method reinforces the duality of the price system, protects the consumer price level, helps to liquidate the relative undervaluation of the use of live labor, and brings us closer toward the unification of the commercial and noncommercial exchange rates.

Present practice wishes to abolish the difference between the commercial and the noncommercial exchange rates through the producer forint's upward revaluation and the consumer forint's forced devaluation, i.e., it is striving to unify the two exchange rates without altering the price-level disproportions that comprise the real basis of the difference.

Reduction of the producer price level by the proposed method actually means a continuous reform of the producer forint. Reduction of the exchange rate is a logical consequence of the producer price level's decline. Uniform indexing ensures that the producer price system's internal proportions--with the exception of the wage costs' desirable upward revaluation--will not change.

Although reduction of the producer price level is an officially ordered act, it will not alter the present system of pricing. Price reduction would assert itself as official regulation of the same type as, for example, the regulation governing the formation of the enterprises' profit level; both the role of central price control and the system of enterprise rights and obligations would remain unchanged.

Specifically the significant reserves presumably existing in economic activity, and the unprecedented low valuation of the use of live labor would Enable us to significantly reduce the producer price level and the exchange rate in 1981.

A substantively identical, but technically more readily applicable, solution would be to systematically increase the wage-commensurate charges, instead of reducing the producer price level, while prohibiting the enterprises from passing on in their producer prices the higher cost arising in this manner. After a certain time, during which additional wage-commensurate charges would accumulate, we could introduce a reform of the producer forint, parallel with reducing the wage-commensurate charges.

Protection of Domestic Price Level

Under the new producer-price system, foreign-market price changes strongly influence the development of domestic prices. If a significant price rise occurs on the foreign market, there necessarily follows a rise also in the domestic prices, and at the same time--if the price rise on the foreign market does not affect evenly all the traded products--the price ratios likewise will be rearranged.

In the case of improving or unchanged terms of trade, an active exchange-rate policy can provide effective protection against inflation on the foreign market: in principle the forint's upward revaluation that corresponds to the difference between the changes in the foreign and domestic price levels will eliminate inflationary pressure. However, we must take into account that the price-level-reducing effect of upward revaluation does not apply to all commodities: a large proportion of the products and services--even in the competitive sphere--does not respond at all, or not fully, to changes of the exchange rate. The problem becomes truly significant in the case of worsening terms of trade, and there is every indication that the coming plan period will be characterized by worsening terms of trade rather than by their improvement. In the case of worsening terms of trade, upward revaluation adjusted to the change of the import price level transmits to the economy the requiremnets of real efficiency. The following problems may arise if there is an upward revaluation of this magnitude: (1) The already mentioned price inelasticity, i.e., the domestic producer price level will rise even in the case of a sharp upward revaluation. (2) At the new exchange rate the profitability of a major or minor proportion of export declines, perhaps significantly. (3) Pressure for greater efficiency is concentrated on export, because in domestic pricing the enterprises are better able to find a way to pass on the additional burden (and this, incidentally, again has a price-level-increasing effect).

Upward revaluation adjusted to the change of the export price level resolves most of these problems, but it will raise the producer price level, commensurately with the extent to which the terms of trade have worsened.

Thus it is easy to see that solely an improvement of efficiency can serve as the foundation for protecting the domestic price level. It will be expedient to formulate this requirement so that it applies evenly to the entire economy: the exporting sector should not be placed at a disadvantage, and price inelasticity should be reduced as much as possible. The feasible way of achieving this is the proposed reduction of the producer price level.

We can truly perceive the weight of the outlined problem and the importance of its solution if we think in terms of the problems of not a one-time exchange rate modification, but of an entire five-year plan period.

Against Devaluation

What has been said up to now I regard as an important argument against the forint's further devaluation. For the sake of completion, however, we must respond to the presentations in which other authors, starting out from a different approach, favor devaluation.

In the following we will consider a change of the exchange rate on the basis of the principle of purchasing power parity, starting out from changes in the import price level and producer price level measured in foreign exchange. I regard as change that preserves the forint's real value any change of the exchange rate that follows fairly accurately the ratio of the two mentioned price-level changes, as a result of which there is neither an upward revaluation nor a devaluation. Upward revaluation occurs when the dollar's exchange rate in forints declines by more than the ratio of the increases in the producer price level and import price level. And the forint is devalued if the reduction of the exchange rate is smaller than the ratio of the changes in the two price levels.

I regard this clarification of concepts necessary because in the professional literature writers often speak only of devaluation or upward revaluation and regard as upward revaluation even a neutral change of the exchange rate that preserves the forint' real value. In KULGAZDASAG, No 10, 1980, for example, Gabor Oblath writes: ". . . an exchange-rate policy that defines its essence in continuous upward revaluation corresponding to the difference between the rise of the foreign and domestic price levels attempts to answer--in terms of its consequences--questions that have not even been formulated as yet, not to mention thinking them thoroughly through" (page 14). Further on Oblath speaks of a "neutral policy of upward revaluation" (page 27) as a synonym for a change of the exchange rate that preserves the forint's real value.

I do not wish to dispute Oblath's mentioned article in detail, the less so because he himself admits that the lengthy review of capitalist experience "is rather selective" (page 26), and ". . . all of the preceding analysis has been rather biased, attempting to demonstrate the potential advantages of real devaluation." Although this selectivity is not objectionable, it does detract from the article's validity as evidence.

Gabor Oblath comes to the conclusion that the economic policy of countries coping with balance-of-trade deficits and striving to expand their export requires an exchange-rate policy of "real devaluation." Let us not contest this statement for the time being, and let us assume that the capitalist countries' practice confirms Oblath's standpoint. However, we must investigate what effect "real devaluation" has on value added, respectively on labor costs that primarily determine it. For we have seen that in all of the investigated countries labor costs rose faster than the producer (wholesale) price level and the import price level. As a result, even in countries that reported nominal and/or real currency devaluation the "labor-cost national currency" was revalued upward, significantly in most countries. (We saw that in this respect Hungary ranked next to last among the investigated countries already in 1978, and that the forint underwent relative devaluation in relation to currencies of all other countries, with the exception of Sweden. This devaluation intensified significantly in 1979 and 1980--this year also in response to the reduction of the wage-commensurate charges.)

Thus we have returned to the fundamental finding that lasting and substantiated restoration of equilibrium can be achieved only through greater efficiency. In the practice of the investigated capitalist countries this was expressed in significantly better valuation of the use of live labor than previously.

The conclusion that may be drawn for exchange-rate policy is as follows: Devaluation (as defined in the clarification of concepts), deemed necessary for whatever reason, will not result in a decline of efficiency only if labor costs rise at least by the same rate as the import price level in terms of national currency. In other words, if we adopt the exchange-rate policy practice of the countries that pursue "real devaluation," we must adopt also their practice in relation to labor costs. Without this, devaluation will lead not to export expansion, and even less to the development of the export structure, but to a reduction of the efficiency requirements, to some sort of clearance sale in export, and in the final outcome to a permanently ensured worsening of the external economic equilibrium.

What can we do under conditions when a political resolution obligates us to raise at a relatively low rate the producer price level and consumer price level, and in conjunction with them the wage level? How is it possible to meet the mentioned requirements and still achieve the necessary increase of labor costs? (I would like to note that labor costs must be increased, as mentioned earlier, even in the case of an exchange-rate policy that preserves the value of the currency or revalues the currency upward, for we must not only prevent the labor-cost forint's devaluation in relation to the base period, but we must also keep pace with the foreseeable continuing upward revaluation of the use of live labor in the capitalist countries.) The solution, in my opinion, can be only the already mentioned reduction of the producer price level, or the substantively identical increase of the wage-commensurate charges.

Of course, Gabor Oblath's statements that an economic policy that calls for the expansion of export can be pursued only with an exchange-rate policy of devaluation is likewise debatable. The fundamental question is to what extent economic policy can compel improvement of the efficiency of export. It is by no means proven that this can be achieved only with an exchange-rate policy of devaluation. Further analysis of this question, however, would exceed the scope of the present article.

1014
CSO: 2500

BRIEFS

CROP GROWING, 1981--The 1981 plan calls for no significant change in the structure of plant production. It is worth noting, however, that the area to be devoted to grains, 61 percent of the total growing area, remains a determining factor. The area planted to grains is to increase by 1.3 percent as compared to 1980. It is typical of standards that we expect yields of 4.5 and 5.4 tons per hectare of wheat and corn respectively. The planned total yield of 13.7 million tons will satisfy population demand, the needs of industry, feed requirements of livestock and leave a certain amount for export. The farms must pay greater attention to prevailing soil and climate conditions in deciding on what to plant where. The hectarage devoted to sugar beets, oleaginous plants and potatoes is to increase; that allocated to vegetables will be similar to 1980. [Excerpt] [Budapest MAGYAR MEZOGAZDASAG in Hungarian No 1, 7 Jan 61 pp 2-3]

CSO: 2500

CROP, LIVESTOCK PRODUCTION EXAMINED

Warsaw ZYCIE GOSPODARCZE in Polish 12 Oct 80 pp 1, 9

[Article by Zdzislaw Grochowski: "Where Do We Get Grains and Meat?"]

[Text] Growth in grain production is a key problem in the development of farming and food economy. On the one hand, the level of grain production is an indicator of overall levels in crops of cultivable plants and hence, indirectly, the level of agricultural intensiveness, on the other hand, it is a major determinant of livestock production growth, especially in meat production. What is termed the grain problem is, in essence, a meat problem, affecting market supply of meat products as a consequence. Accordingly, the grain problem should be examined not only against the background of the production outlook in farming alone, but also in terms of the situation in the entire national economy, including foreign trade.

The grain problem occurred with varying acuteness throughout the entire postwar period of Poland's agricultural development. Domestic grain production did not meet the country's needs and had to be supplemented with imports. Prior to the early 1970's, grain imports were relatively small, and their value was lower than the value of exported farm produce and food. Although lacking self-sufficiency in grain production, our country was not only fully self-sufficient in food production, but also received foreign exchange from its food exports to finance development in other sectors of the national economy.

Disproportions in the Development

Although in the early 1970's grain imports doubled the figures for the preceding 5-year period and foreign trade in farm and food products showed a negative balance, the nation's food consumption standards radically improved. For example, per capita meat consumption increased by as much as 17 kg over the 5-year period, which is somewhat more than it had risen over the previous two decades (1959-70) in which the increase amounted to 16.5 kg.

In the second half of the decade, despite another doubling of grain and feed imports and an increasingly adverse foreign trade balance in farm and food products that passed the billion mark in 1979, per capita meat consumption remained--with some fluctuation--on the 1975 level. Thus, further increases in Poland's debt are the price of maintaining a consumption level reached 5 years ago.

There are many objective and subjective causes of this steady deterioration in the balance of grains and in the balance of foreign trade in farm and food products (not to mention meat supply to the market). Foremost among the subjective causes is the widening gap between supply and demand in manufactured capital goods for agriculture. None of the programs concerning the supply of such goods, approved by the 15th Plenum of the PZPR Central Committee in 1974, is being implemented (e.g., instead of 250 kg of mineral fertilizer per hectare in 1980, there will be less than 200 kg), although wage and personal incomes policies were predicated on a rapid rate of growth in agricultural production and improvement in the nations nutrition standards. Supply shortages in agricultural capital goods were additionally aggravated by errors in agrarian policy and production policies that caused improper utilization of a part of those scant capital goods.

Cumulative data on growth in agricultural production during the 1970's in Table 1 demonstrate increasing disproportions between crop production and livestock production. Over the first 5-year period, crop production increased by nearly 13 percent and livestock production by 21 percent, while in the second 5-year period (through 1979), there was no increase in crop production while livestock production rose another 6 percent. The widening gap between increases in livestock production and crop production was being filled by growing imports of grains and fodder. Overall, the increase in fodder fed to productive livestock in the 1970's included a 47 percent share of imported (imports had a similar share in the livestock production increment), 25 percent of domestic grains and 28 percent of nongrain fodder (Table 1).

Along with a 28 percent increase in livestock production during the 1970's, there was an increase of only 15 percent in the use of nongrain fodder, while the corresponding figure for (domestic and imported) grain fodder was 92 percent. In effect, the consumption of nongrain feed per livestock production unit dropped, while the consumption of (concentrated) grain feed increased by a full 50 percent. While in 1966-70 the consumption of concentrated feed averaged 2.08 kg per kg of livestock production equivalent, each kilogram of the livestock production increase required a 5.5 kg increase in concentrated feed consumption in the first half of the decade, and 10.6 kg in the second half. This substantial, and appropriately costly, increase in the consumption of concentrated feed per 1 kg of livestock production increase resulted, on the one hand, from substitution for the declining consumption of nongrain feed and, on the other hand, from the declining effectiveness of feeding processes. This decline was due to improper quality of commercial fodder (caused by major shortages of chemical additives as well as other reasons), to failure to match commercial fodder varieties with farm fodder reserves because of improper composition of imported fodder (insufficient quantities of high-protein feed in relation to grains) resulting in underutilization of energy components from both imported and domestic feed, and to excessive pressure to develop livestock production in the socialized sector, including those producers whose feed utilization surpassed reasonable limits (e.g., agricultural circles and plant feedlots).

Although increased grain-absorptiveness in livestock production is an objective process that accompanies intensification in agricultural production, the increase that occured in Poland during the 1970's was at least 10 years ahead of a normal developmental trend. In practice, this means that a 10 year gap separated the level of crop production. The current rate of grain-intensiveness of production should be achieved no sooner than 1990 if livestock production growth and crop production growth were balanced. This puts livestock production in an exceptionally difficult situation in the coming years because there are no chances that an increase in crop production, grains in particular, will become available to fill the gap. Considering that the outlook for the next 5-year period virtually disallows imports of grains and fodder to be maintained at the present level because of Poland's large and continually growing debt, we should anticipate a decelerated rate of growth in livestock production in relation to the present long-term trend (2.9 percent annual average throughout the 1950-79 period).

Changing Strategy

Livestock production growth rate over the next 5-year period will depend not only on modifications in grain and fodder imports but also--given the current supply of capital goods for agriculture--on the strategy for further agricultural development. If continued, the present developmental strategy will, especially in view of reduced grain and fodder imports, fail to assure even such a measure of growth in livestock production which would permit the present per capita livestock product consumption level to be maintained, considering that Poland's population will increase by more than 1.5 million persons in the next 5 years.

With the current level of grain and fodder imports, livestock production increments over the next 5-year term will depend on increases in plant crops and yields, including grains, on improvement in fodder utilization and on changes in grain-intensiveness of livestock production.

It is seen from Table 1 that the years 1976-79 saw a complete stagnation in crop levels, including 1.1 million tons less grain produced annually as compared with the previous 5 year period. Aside from a reduction of agriculturally utilized land (by 250,000 hectares) and a series of years adversely affecting crop production, grains above all, the lack of growth in crop production was for the most part caused by stagnation in mineral fertilization. In the socialized economy, mineral fertilization remained for the past 4 years on a virtually unchanged, relatively high level (approximately 307 kg per hectare) which, since the area farmed under the socialized economy expanded by 800,000 hectares (22 percent), resulted in a decline from 161 kg to 150 kg of fertilizer per hectare in individual farming. Despite more than doubled fertilizer application, the socialized economy still falls behind individual farming in crop levels per hectare of farmed land, expressed as value of total crop production. This is due both to a more extensive crop sowing structure and substantial takeover of new land, yielding poorer crops in the first few years.

The decline in grain crops in the second half of the 1970's resulted, in part, from decreasing yields, and, in the main, from a reduced sowing area, steadily declining for a number of years. During the last decade it shrank by 590,000 hectares, including 180,000 hectares owing to loss of agriculturally used land and 410,000 hectares because of a reduced share of grains in the crop sowing structure. Since in individual farming this share remains practically unchanged (57 percent at this time as against 57.3 percent 10 years ago), nationally, this decrease is approximately 90 percent attributable to the increase in area utilized by the socialized sector and the drop in the share of grains in that sector's crop sowing structure (from 46.3 percent in 1966-70 down to 42.9 percent in 1976-79).

The socialized economy's share of grains in the sowing structure having been reduced in relation to the share of individual farming resulted in each of the last few years in our agriculture producing nationally nearly 1.2 million tons less in grain output (costing us about $150 million annually), with no compensatory gains either in other kinds of crop production or in livestock production.

Despite higher grain yields, grain production per hectare of agriculturally utilized land is lower in the socialized sector. This is in glaring disproportion to the grain-absorptive livestock production methods and, ultimately, end results obtained in production per unit of area. This is illustrated by numerical data for 1979 in Table 2.

Lower (12 percent down) grain production per hectare of agriculturally utilized land and higher (by 25 percent) use of concentrated fodder by productive livestock, registered by the socialized sector in comparison with individual farming, are accompanied not only by lower livestock production (by 15 percent) which is, of course, a consequence of the (48 percent) higher grain-absorptiveness of this production, but also by negative net crop production (which means that the value of purchased fodder and seed is greater than the value of sold crop products)*, whereas in individual farming this value is positive (accounting for 20 percent of crops), in spite of the fact that approximately 10 percent of harvested crops is used to feed horses (the corresponding figure for the socialized economy is approximately 1 percent).

Inefficiency

Livestock production in the socialized economy is not only more grain-absorptive but also more land-absorptive than it is in individual farming. The latter allocates 66 percent of agriculturally utilized land for fodder for productive livestock, while 94 percent is designated for that purpose in the socialized sector. Each hectare of fodder-designated area yields 509 kg of livestock products in the individual farming and 302 kg in the socialized economy. These substantial differences in per hectare livestock production are the result of both a lower crop level per hectare of agriculturally utilized land--a consequence of a broader sowing structure (including more than a doubled share of fodder plants)--and a significantly lower rate of economic effectiveness in the feeding process. The higher value of fodder (by 32 percent) used in the socialized sector to produce 1 kg of livestock production equivalent results, in part, from its greater share in the production of beef slaughter cattle which requires twice as much fodder consumption per unit of end product (meat) than do other livestock products. In individual farming, the share of beef slaughter cattle is about 12 percent (in meat equivalent units), while in the socialized sector it is approximately 21 percent and in the PGRs [State Agricultural Farm] even 23 percent.

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*note placed at end of article

Table 1

Cultivable Plant Yields and Crops, Livestock Production, and Grain-Intensiveness and Feed-Intensiveness of Livestock Production (annual averages ofr five-year periods)

a. itemization
b. arable land in millions of hectares
c. crops of cultivable plants in millions of tons of grain units
d. per hectare yields in grain units
e. share of grain acreage in percentages
   of arable land
   of area under crops
f. harvested grain crops in millions of tons
g. grain yields in quintals from 1 hectare
h. grain and feed imports in millions of tons
i. feed consumption by productive livestock in millions of tons
   of grain units, including:
   nongrain feeds, and[1]
   concentrated feeds
j. livestock production in millions of tons[2]
k. feed consumption in grain units per 1 kg of livestock production,
   in which:
   nongrain feeds,
   concentrated feeds.[1]

Footnotes for Table 1.

1--in weight units.

2--In conversion units (1 ton of meat-fat bulk, equalling 1 ton of eggs, equalling 6.7 tons of milk, equalling 0.28 ton of wool.

Table 2

a. Itemization
b. private farming
c. socialized farming
d. total grain production in kg per hectare
e. concentrated feed consumption in kg per hectare
f. livestock production in kg per hectare
g. concentrated feed consumption per kg of livestock production
h. value of ultimate net plant production in thousands of zlotys per hectare.

This, also, is one (through not the only one) reason for grain having a low share in the crop sowing structure, because with their high ratio of fattening cattle, state farms attempt as their first priority to assure themselves of adequate quantities of bulky feeds and designate as much as 37 percent of their arable land for that purpose, while individual farms so designate only 13 percent of their arable land.

Lower crops per hectare of agriculturally used land and lower effectiveness of the feeding process are what causes state farms to obtain barely 59 percent of individual farms' livestock production per hectare. If productivity of state farm lands rose to the level of private farming, we would gain, nationwide, 850,000 tons of livestock products, or 14 percent more, even with the current rate of grain and feed imports. Of course, it is not quite possible to equalize in a brief period per hectare feed yields in the socialized sector and the individual sector. However, a substantial improvement in the former is a basic condition for growth in raising livestock production to levels assuring increased in per capita livestock product consumption by 1985.

Increased yields of feed-crop area are not necessarily accompanied by increases in livestock production in the socialized sector; conversely, that area should be reduced, with a part of feed-crop land being made available for cultivation of marketable crops, primarily grains. It is a paradox, after all, that a socialized economy has shortfalls in grain production, although the reverse is true all over the world: large land-holding farms are grain producers, while small farms are producers of livestock products, in part, from grains supplied by the large farms. Hungary may serve as an example in which, notwithstanding nearly complete socialization of agriculture, approximately 55 percent of live hogs and nearly 74 percent of poultry come from small-scale producers. A similar division of tasks between the sectors would be particularly advisable in our situation, since Polish individual farms, using different feeding processes, consume substantially smaller quantities of grain per unit livestock production and more efficiently utiliza local farm feeds.

Among the errors of agrarian policy of the late 1970's was forcing growth in livestock production in the socialized sector, regardless of the conditions and costs of this growth. This came as a response to a decline in the number of hogs in the private farm sector, caused by the poor grain harvest of 1975. This decline was additionally aggravated in the next 2 years when feed sales to private farms were radically reduced, with a corresponding increase in feed deliveries to state farms. On the one hand, a response of this kind was an expression of virtually irrational belief in the effectiveness of directives which, unfortunately, as a rule defeat their own purpose when applied to farming. On the other hand, it expressed the ineptness of agricultural policy, failing to control growth in agricultural production in private farming by means of economic instruments.

Increasing livestock production in the socialized sector by decree, allegedly to salvage the meat market, was a myopic move, ultimately resulting in a reduced, and, also, more expensive (import-intensive) increment in national livestock production. The transfer of livestock production from individual to socialized farming resulted in approximately 1 million tons more in consumed concentrated feed. At this time, the entire socialized economy (including feedlots owned by nonagricultural sectors) consumes 2.2 million tons more concentrated feed that is used in private farming to produce an equal amount of livestock products.

Excessive development of livestock production in socialized farms adversely affected effectiveness of the feeding process and caused considerable deterioration in economic efficiency over the last few years.

The transfer of hundreds of thousands of calves and millions of piglets from private farms to state farms for continued raising (frequently, to primitive makeshift facilities) resulted in diseases and numerous deaths among these animals, translated into billions in financial losses and slight or even zero gains in weight in the first few weeks. In consequence, feed consumption was high and ineffective, which was reflected among other things, in a declining productivity of feed-crop area (from 348 kg of livestock products per hectare in 1975 down to 302 kg in 1979, while in individual farming there was an increase from 483 kg to 509 kg).

Land Policy

The above comments on intersectoral differences in grain production, grain-intensiveness and livestock production effectiveness unequivocally suggest conclusions about further production policies in agriculture over the next decade.

In order to improve the current low productivity and efficiency in the socialized economy, that economy should not be burdened with takeover and development of new lands. Land transfers to the socialized sector should be reduced to a minimum, i.e., those cases in which there are actually no prospective buyers among private farmers (who should be given unconditional first option in purchasing PFZ [State Land Fund] lands). In order to create improved farming conditions, all enclaves of socialized land located amid private lands, particularly those remote from economic centers, should be offered for sale to private farmers.

It is necessary for state farms to substantially increase the acreage of grain cultivation (even at current prices, this is one of the most profitable branches of farm production in this sector), which calls for major changes in the present farming system, including a substantial reduction of livestock, especially in the number of fattening cattle in order to obtain surpluses of marketable grain to meet national economic needs--among others, those of small hog-raising individual farms. The decline in livestock production in the socialized sector can be compensated, with a major surplus, by expansion of livestock production in private farming, provided that the latter is better equipped with capital goods and assured of steady production profits through, among other things, a more flexible policy on agricultural prices than has been the case until now.

By reducing further increases in socialized farm acreage to a minimum, opportunities would be created for a more reasonable allocation of capital resources within the agricultural establishment. A major portion of investment resources and working assets channelled to agriculture has been earmarked for the development of lands taken over by the socialized sector from private farmers. In other words, these were outlays expended to modify the form of ownership in agriculture. In terms of production, the effect of these outlays nationally was insignificant, frequently downright adverse, since the land that was taken over, especially the areas taken over by the ZGR [Farm Union] and the RSP [Agricultural Producer Cooperatives] generated not only significantly smaller, but also more expensive agricultural production than would be the case if these areas had been taken over by private farmers. The outlays that until now have been designated for land takeovers by the socialized sector can be allocated for upgrading equipment in both private and state farms. This would result in a greater increase in total agricultural production than can be gained if the present policy of systematic modifications is continued.

As outlined above, these directions for change in farm policy and production policy concerning particular agricultural sectors are indispensable from the point of view of overall agricultural and national economic interests. They will undoubtedly permit a certain mitigation of existing strains in the grain-feed balance, though falling short of removing these strains because--as we have tried to demonstrate--of the gap between livestock production growth and plant production growth.

An increase of at least 55 percent in the share of grains in the socialized sector's crop sowing structure would permit increasing grain cultivation acreage to approximately 8.3 million hectares in 1985. An increase in grain yields (as well as in other plant crops) will essentially depend on stepped-up mineral fertilization. Increments in this type of fertilization should be primarily channelled to the private sector which is obtaining significantly higher marginal increments in yields. If fertilizer use in agriculture as a whole increased up to about 250 NPK [nitrogen, phosophorus, potassium mixture], it would be possible around 1985 to count on achieving approximately 30 quintals per hectare in grain yields and a crop within the 25.5 million-ton range in 1985. Since in the last few years grain resources, that is, domestic production plus grain and feed imports averaged 27.6 million tons, the expected increases in grain crops by 1985 do not offer reasonable chances for concurrent attainment of two goals: a reduction in the grain imports to a level assuring a balanced foreign trade in farm and food products, and an increase in livestock production that would be felt in the domestic market. It is estimated that achieving a balanced foreign trade would be possible if grain and feed imports were reduced by one-third (in terms of value) with simultaneous increases in exported farm and food products. With nearly 4.5 million tons in imports (including nearly 2.5 million tons of high-protein feeds), it will be possible to allot nearly 21 million tons for productive livestock feeds, which is by almost 2 million tons (approximately 9 percent) more than was the average for 1978-79. If grain-intensiveness of livestock production registered no further increases (owing to increased shares of imported high-protein feeds, among other reasons), livestock production growth by 1985 would also amount to 9 percent. The rate of growth in livestock production would thus annually average approximately 1.4 percent, that is, it would be half as rapid as the long-term rate of growth.

Bringing the balance of foreign trade in farm and food products into equilibrium requires growth in livestock product exports, including meat, to at least the level achieved already in 1974-75. In this situation, livestock production increments by 1985 would only permit the per capita level of consumption of livestock products to be maintained at the present level.

Thus, despite the rather optimistic assumptions as to growth in area sowed, yields and grain crops, as well as curtailing further growth in the grain intensiveness of livestock production, the likelihood of increased animal product consumption is minimal, provided, of course, that we exclude a further, permanent deficit in foreign trade in farm and food products, which is equivalent to maintaining large imports of grains and feeds, or else restrictions on livestock product exports. This would be possible only with a positive balance of foreign trade in industrial goods and a positive balance of payments for the nation. This is not a realistic prospect for the next 5 and even 10-year period, considering Poland's enormous debt.

The only way for per capita livestock animal product consumption to be increased by 1985 is to reduce the current livestock production grain intensiveness and to improve substantially in the effectiveness of the feeding process (which declined by 7 percent over the last decade). This improvement also depends on the above-listed modifications in agricultural and production policies applicable to private farming, socialized farming and an array of nonagricultural endeavors as well. Of primary concern here (to stay within the bounds of feed management) is a significantly enhanced commitment of machine-building industry to the manufacture of machinery equipment and tools for harvesting, preservation and preparation of feed, and a similar commitment of the chemical industry to the manufacture of a range of feed supplements, which would permit improvement in the quality of commercial feeds and, consequently, improved utilization of grains and other domestic feeds.

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[*] In the PGR [State Farms] it is positive (1,200 zlotys per hectare) while in the RSP [Agricultural Producer Cooperatives] and ZGR [Farm Union] it is negative (minus 5,700 and minus 6,600 zlotys per hectare, respectively).

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ECONOMIC DEVELOPMENT, INCREASED PROSPERITY REVIEWED, COMPARED

Bucharest REVISTA ECONOMICA in Romanian No 52, 26 Dec 80 pp 3-5

[Article by Prof Dr Gheorghe Cretoiu]

[Text] At the border between two decades, the Romanian people are concluding the process of carrying out a five-year plan (1976-1980)with specific significance in the process of socialist construction and, at the same time, they are approaching the grand program established by the 12th party congress for the seventh five-year plan (1981-1985).

A New and Important Stage of Progress and Civilization

As a result of the totally selfless work of all the people, carried out under the leadership of their communist party, an important stage in the program to create the multilaterally developed socialist society and direct Romania toward communism was traveled in the 1976-1980 five-year plan successfully, as stressed by Comrade Nicolae Ceausescu at the RCP Central Committee Plenum of October, with Romania rising to a new level of progress and civilization. The production forces continued to develop at a sustained rate, the modernization process of the national economy was accentuated on the basis of application of the modern scientific-technical achievements in all areas of activity and qualitative changes were accentuated in the economy. Important changes took place in the territorial placement of production forces in the country and methods and forms of leadership were improved for social-economic activity as well as production relations. On this base are provided the consolidation of the method of socialist production, rise in the degree of civilization of all the people and strengthening of the country's economic force and of Romania's independence and sovereignty.

In this regard the figures in Table 1 are graphic; they bring out the sustained development of the Romanian economy in this five-year plan, carried out both at high rates of development for the basic indicators of social-economic development as well as the special contribution of the 1976-1980 five-year plan to achieving the current level of social product and national income. Thus, the more than 7-percent average annual increase recorded for social product and 8-percent increase in national income place Romania among the countries with highest rates achieved in this period. According to figures of the World Bank, the average annul growth rate for gross domestic product in 1970-1978 for industrialized countries as a whole was 3.4 percent. In 1976-1979 the average annual growth rate for national income was 6.2 percent in Bulgaria, 3.9 percent in Czechoslovakia, 4 percent in the GDR, 4.4 percent in the USSR and 4.5 percent in Hungary. It was 3.3 percent in France and Italy, 3.6 percent in the FRG and 5.7 percent in Japan for gross domestic product. An increase of 2.6 percent in France and 1.5 percent in Italy, 2.5 percent in the FRG and Austria, 3.6 percent in Sweden and 1.5 percent in Switzerland is estimated for 1980.

Table 1
Main Indicators of Romania's Social-Economic Development

		1950	1965	1975	1980	1980/1950	1. Ritm mediu anual în anii 1976/1980
2.	Populatia (mii loc.)	16 311	19 027	21 245	22 420	1,4 ori	1,1
3.	Numărul personalului muncitor (mii pers.)	2 123	4 305	6 300	7 435 *)	3,5 ori	3,4
4.	Fonduri fixe (mird. lei)	207	517	1 303	1 950	8,6 ori	10,1
5.	Volumul investițiilor (mird. lei)	6,3	47,0	137,7	232,9	36 ori	11,1
6.	Produsul social (mird. lei)	63	344	883,7	1 375	15 ori	7,2
7.	Venitul national (mird. lei)	35	146	381,0	548	15 ori	8,0
8.	Venitul național pe locuitor (lei)	2 145	7 676	17 038	24 353	11,4 ori	7,4
9.	Productia globală industrială (mird. lei)	27,5	178,4	580,9	985	34 ori	10,0
10.	Productia globală agricolă (mird. lei)	12,4	62,5	93,8	167,7— 157,2	3,8— 4,1 ori	5,2
11.	Comerțul exterior (mird. lei)	8,3	43,9	...	335,6	42 ori	16,6
12.	Veniturile din retribuția muncii personalului muncitor (mird. lei)	10,1	57,3	137,3	211,6	21 ori	10,7
13.	Venituri totale ale populației (mird. lei)	33,5	119,2	267,2	363,0	10,8 ori	8

Key:

1. Average annual rate in 1976/1980
2. Population (millions of residents)
3. Number of worker personnel (millions of persons)
4. Fixed assets (billions of lei)
5. Volume of investments (billions of lei)
6. Social product (billions of lei)
7. National income (billions of lei)
8. National income per capita (lei)
9. Total industrial production (billions of lei)
10. Total agricultural production (billions of lei)
11. Foreign trade (billions of lei)
12. Income from worker personnel's salary for work(billions of lei)
13. Total incomes of the population (billions of lei)

* Plan level; increases for value indicators were calcuated at comparable prices.

With regard to the role of the 1976-1980 five-year plan in increasing Romania's economic potential and in increasing the possibilities for progress, it should be mentioned that the absolute increase compared with the previous five-year plan was 184 billion lei for national income, nearly 378 billion lei for industrial production, around 53 billion for total agricultural production and more than 740 billion for fixed assets in operation. These increases represent more than 33 percent of the current level of the national income, more than 39 percent of the level of total industrial production and 36 percent of the level of total agricultural production.

Sustained Rise in Material Production

At the base of Romanian economic progress have been the continued development and modernization of industry, which has recorded a 10-percent increase in total production. Against the background of this increase have taken place important quality changes in the area of industrial development, in the forefront being the overtaking of the growth rate of total production by net production or new value, the onlv thing which assures resources for development and for rise in the people's well-being.

Accentuation of the modernization process of industrial production, based on introducing the achievements of the current scientific-technical revolution into production, has been aided by the more rapid development of the industrial branches with a decisive contribution to the entire national economy and which utilize the country's human and economic potential on a high level. In this context we should note the development of the machine-building industry, with an average rate of 13 percent, a branch which utilizes natural resources and the people's creative potential on a high level; covering the needs for machinery and equipment to implement the investment programs in a great proportion, these activities are exercising a decisive influence on the other branches of the national economy. Also, there has been sustained development of ferrous metallurgy and the chemical industry, which have increased their production by 11.6 percent and 10.3 percent, respectively, which is the average per year, contributing substantially to providing the base of raw materials and to satisfying the other needs of the national economy. At the same time, light industry production increased by 10.3 percent, while that of the food industry increased 7.3 percent average per year.

Pointing out the qualitative changes which have taken place together with this development of the economic branches, Comrade Nicolae Ceausescu emphasized at the October RCP Central Committee Plenum: "New and modern production units have been created and they today give our machine-building industry and metallurgical and chemical industry the opportunity to solve nearly all technical problems of quality, assuring the competitiveness of Romanian products at the international level. In turn, light and food industry as well as the rise in the production of consumer goods from the other sectors have assured satisfying the needs of the masses under better conditions, also creating reserves for export." On this base an important increase in per capita production took place for the main industrial products (see Table 2) .

As a result of the sustained efforts for the country's industrialization and for growth and diversification of industrial production, the differences have been reduced, the differences separating Romania from the industrially developed countries and our country's position has changed on a number of basic physical products compared with the average level achieved at the world level. Thus, as may be seen in Table 3, Romania has approached very closely the level of the countries mentioned in the production of electric energy and has equalled or exceeded per capita steel production of some countries as England, Italy, France, GDR and approaching very closely the FRG and Czechoslovakia; also, with the 49 square meters of material and 5 pair of shoes per capita, our country has exceeded the level achieved by England, France, GDR, FRG and Italy and has come very close to Czechoslovakia.

Table 2: Evolution of Per Capita Production for Some Industrial Products

		1. U/M	1950	1965	1975	1980
2.	Energie electrică	kWh	130	903	2 520	3 211
3.	Cărbune net	kg	107	340		2 036
4.	Oțel	kg	31	180	440	600
5.	Tractoare	6. buc. la 10 000 locuitori	3	8	24	30
7.	Autoturisme	"	—	2	32	34 *)
8.	Televizoare	"	—	5	21	26 *)
9.	Îngrășăminte chimice [illegible]	kg	8	15	61	114
10.	Fibre și fire chimice	kg	0,1	1,0	7,0	10,6
11.	Țesături	12. mp	12	23	41	53,4
13.	Încălțăminte	per.	1	2	4	5,2
14.	Uleiuri comestibile	kg	2	9	15	17 *)

Key:

1. Unit of measure
2. Electric energy
3. Net coal
4. Steel
5. Tractors
6. Number per 10,000 residents
7. Cars
8. Televisions
9. Chemical fertilizers
10. Threads and chemical fibers
11. Material
12. Square meters
13. Shoes -- pairs
14. Edible oils

* 1979

As a result of the quantitative accumulations and qualitative changes which have taken place, there has been an emphasis on the leading role of industry in the national economy and the country's industrial nature has been emphasized; currently industry holds more than 43 percent of fixed assets, it employs around 35 percent of the labor force (compared with 30.6 percent in 1975) and is creating 60 percent of the country's national income; at the same time, it covers more than 77 percent of the demand for machinery and equipment by the national economy (in 1976-1979). But the emphasis on the industrial nature of the economy is demonstrated not only by industry's large share in creating the national income but also by the continuous change in the content and nature of work in the other branches of the national economy, by providing machinist technology and by having industrial procedures penetrate into agriculture, construction, transportation and into the entire economy. Through all this industry is a decisive factor in the country's social and economic progress.

In agreement with the party program, within the proportional development of all branches of the economy, the need has been provided to assure a correct ratio between industry and agriculture. In the 1976-1980 five-year plan greater attention was given to the development and modernization of the material-technical base and to agricultural production. In 1976-1979 alone more than 97.6 billion lei were allocated for investments in this branch, which permitted increasing the tractor stock by more than 20,200 , irrigating around 860,000 hectares in the five-year plan years; at the same time, the quantity of chemical fertilizer belonging to one arable hectare of land rose from 95 kg in 1975 to 124 in 1979. As a result, despite the fact that shortcomings were demonstrated in this branch, shortcomings which hindered total fulfillment of the level of production forecast in the five-year plan, agricultural production rose more than an average of 5 percent per year, a rate higher than that recorded by the other neighboring socialist countries and by the capitalist countries with developed agriculture.

Table 3: Evolution of Per Capita Production for Certain Industrial Products Compared With the Production at the World Level and in Certain Developed Countries

	1. Anii	Energie electrică 2. kWh	Oţel 3. kg	Televizoare 4. buc/ 1 000 loc.	Fibre şi fire chimice 5. km	Ţesături 6. m.p.	Încălţăminte 7. perechi
8. România	1950	150	34	—	0.1	12	1
	1960	416	98	—	0.2	18	2
	1970	1 732	322	14	4.0	30	3
	1975	2 329	449	24	7	41	4
	1979	2 945	585	26	9.0	49	5
9. Media mondială	1960	709	118	6.1	1.1	22.7	—
	1970	1 291	165	13.0	2.3	22.0	—
	1975	1 653	162	12.4	2.6	19.8	—
	1979	1 831	166	—	3.0	21.0	—
10. Anglia	1950	1 251	327	—	—	—	—
	1960	2 607	470	40.7	5.1	46	3.3
	1970	4 185	510	39.9	10.7	30	3.2
	1975	4 853	359	30	10.0	24.1	2.8
	1979	5 094	386	—	10.6	21.7	2.9
11. Cehoslovacia	1950	749	252	—	—	—	—
	1960	1 791	496	19.3	4.8	52.3	4.2
	1970	3 151	801	26.7	7.1	56.3	7.2
	1975	4 014	970	30.8	9.5	30.7	7.7
	1979	4 484	1 010	29.5	10.0	38.2	7.2
12. Franţa	1950	791	207	—	—	—	—
	1960	1 644	378	14.3	3.6	30.5	3.4
	1970	2 771	466	29.8	6.0	41.0	3.8
	1975	3 396	408	30.5	5.8	38.3	3.0
	1979	4 409	438	—	5.8	33.1	2.8
13. RDG	1950	1 059	60	—	—	—	—
	1960	2 128	218	24.2	9.0	39.0	3.3
	1970	3 986	296	22.3	12.6	43.0	4.6
	1975	5 015	384	30.2	16.7	44.2	4.7
	1979	5 781	420	34.8	17.4	44.1	4.7
14. RFG	1950	929	253	—	—	—	—
	1960	2 170	641	40.7	5.3	43.2	3.6
	1970	4 157	770	50.2	12.1	37.1	3.3
	1975	5 940	675	36.1	12.3	42.5	1.8
	1979	6 186	774	—	13.3	38.4	2.1
15. Italia	1950	528	53	—	—	—	—
	1960	1 120	164	14.5	3.4	40.8	1.8
	1970	2 180	322	30.7	7.9	29.9	6.7
	1975	2 615	391	28.1	7.4	30.1	5.4
	1979	3 175	423	—	11.0	34.4	7.0

Key:

1. Years
2. Electric energy-kWh
3. Steel-kg
4. Televisions -per 1,000 residents
5. Threads and chemical fibers--kg
6. Material--square meters
7. Shoes-- pair
8. Romania
9. World average
10. England
11. Czechoslovakia
12. France
13. GDR
14. FRG
15. Italy

Other branches of the national economy--construction, transportation, trade--also have seen important progress. In accordance with the growth in the population's buying power, the volume of sales of goods in this five-year plan increased 52 percent. At the same time, the volume of foreign trade also increased at an average annual rate of more than 16 percent. As was pointed out at the October RCP Central Committee Plenum, export, however, increased more slowly (16.1 percent) compared with import (16.8), which had a negative effect on the country's balance of payments.

The Romanian Economy's Ability To Adapt

As a result of the development of production forces and increase in material production, the national income rose 47 percent in this five-year plan, rising from 17,000 lei per capita in 1975 to more than 24,300 in 1980. The average annual growth rate for per capita national income in this five-year plan--7.4 percent--considerably outstripped that recorded at the international level.

The results obtained in Romania's social-economic development are all the more relevant since the Romanian people in the five-year period we are concluding had to overcome many difficulties, both domestically as well as internationally. Thus, the earthquake in the spring of 1977 brought great destruction and hardships, and great efforts were needed to eliminate them, while the floods and unfavorable weather conditions in many of the years also caused large losses, particularly in agricultural production. At the world level, aggravation of the economic crisis and of the energy crisis, the unjustified rise in oil prices as well as other processes and phenomena which accompanied the economic crisis exercised a negative effect, requiring serious efforts from our economy to fulfill the goals forecast.

The achievements with which this five-year plan is concluding, achievements gained under such conditions, bring out all the more the heroism with which all the Romanian people worked for the multilateral progress of their socialist country, proving, as in the previous stages, their constructive vocation and their ability to assure social and economic progress and the country's firm move forward along the path of creating the multilaterally developed socialist society, under the communist party's leadership. At the same time they are an eloquent proof of the scientific nature of our party's political line and its ability to make a thorough investigation of the national and world economic realities and, on this basis, to adopt the paths of action and the best specific methods and solutions.

At the foundation of the country's strategy for social-economic progress were placed development and modernization of society's material-technical base and, in the party's concept, the country's economic power and ability to adapt the economy to the changes occurring in the area of production forces and in the structure of social production nationally and internationally depend on the level, structure and efficiency in utilizing it.

More than 2,500 new large economic projects were placed into operation by allocating a large portion of the national income for accumulation (around one-third and in some years even more) in the 1976-1980 five-year plan, with the volume of fixed assets placed into operation rising at an average annual rate of more than 10 percent in this same period.

Important changes took place in the structure and technical level of the material-technical base by raising the share of the most active part--machinery, installations and equipment--as well as by supplying new production capabilities or the modernized ones with means of modern work. What is significant for the high degree of modernity of our production apparatus and for the contribution to the current five-year plan in this regard is that nearly 40 percent of the value of fixed assets which our economy currently has available (1,950 billion lei) were placed into operation during the last five-year plan. As stressed by Comrade Nicolae Ceausescu at the October RCP Central Committee Plenum all this shows that a powerful material-technical base was created in this five-year plan for successfully carrying out the program adopted by the party. Continuing this orientation, the priority task in the next five-year plan is to bring our material and technical potential to fruition at a high level.

On the basis of an important investment program it was possible in the 1976-1980 five-year plan to achieve an increase of more than 1.1 million persons in worker personnel, of whom more than 500,000 were in industry. Thus, two basic aspects for our socialist economy and system were entwined: one is the social-economic aspect, consisting of using the capabilities of the main production force and the most important wealth--man; the second is the social-human aspect, which depends on the implications in creating new jobs at the level of increasing the population's incomes and affirmation at the level of concrete work for the country's prosperity. The creation of new jobs in the Romanian economy powerfully contradicts the situation in the capitalist countries where, particularly under conditions of the current crisis, unemployment has reached proportions never before encountered in the entire postwar period.

An important contribution to fulfilling the goals of the current five-year plan is being made by science and the broader promotion of the achievements of advanced science and technology in social-economic life.

An Increase in Efficiency--A Decisive Factor in The Development and Improvement of Quality of Life

An important factor in the social-economic development in the recently concluded five year plan has been the growth in labor productivity and, in general economic efficiency. In industry an average annual growth rate in productivity of 7 percent was achieved, while the productivity of social labor, calculated on the basis of national income created by one working person in the material production branches, increased more than 48 percent. According to some calculations, (see "L'Economie Europenne en 1979"), for the 1976-1979 period the growth rate of social labor productivity was 6.6 percent in Bulgaria, 3.2 percent in Czechoslovakia, 3.5 percent in the GDR, 2.7 percent in Poland, 3.4 percent in the USSR and 4.4 percent in Hungary.

Measures were adopted to improve the organization of production and work, production expenses were reduced and the process of the renovation and modernization of products and utilization of material resources was accented. An eloquent expression of the qualitative changes in the economy is the more rapid growth in net production in industry compared with total production (1.06 percent is the coefficient of advance), as well as having the increase in social product being outstripped by national income increase (coefficient 1.11 percent). The introduction and extending of the new economic-financial mechanism aims at the more powerful mobilization of the economic units with a view to more efficient use of the assets available and fructification of all opportunities for increasing economic efficiency.

Despite this, as emphasized in our party's documents, some defects and shortcomings also have been demonstrated in this area; the prevention or elimination of them would have permitted our obtaining larger production. In many enterprises the material expenses and energy consumption remain high, nor have the programs in the area of technical progress been carried out fully and slowness has been demonstrated in applying the new economic-financial mechanism. Eliminating these shortcomings and having a more emphatic growth in economic efficiency for that reason is a task of primary importance in next year's plan, as stressed by Comrade Nicolae Ceausescu at the 16-17 December RCP Central Committee Plenum: "Let us place a great emphasis on superior utilization of raw materials in order to obtain products with a high degree of processing and high quality from the same quantity of raw materials. Only in this way will we be able to assure implementation of the program to increase efficiency, profitability for all sectors of activity and incomes of the workers and the national income, in correlation with all the other measures forecast."

The results obtained in the five-year plan we are concluding and, in general, the experience of socialist construction in Romania show that the lasting basis for any progress in the population's living and working conditions lies in the steadfast increase in economic efficiency, rise in the production of material goods and sustained increase in the national income, the irreplaceable source for accumulation and the resources intended to raise the people's standard of living. The best witness in this regard is the achievements of the 1976-1980 five-year plan, in which the initially established forecasts in the area of standard of living were exceeded by a lot on the basis of the supplementary resources resulting from the increase in social production and economic efficiency, with the greatest increase having been obtained in the population's real salaries and incomes.

The product of our people's heroic work and the determination with which the workers steadfastly fulfill the party's policy, the economic, technical and social-political accomplishments and achievements of this five-year plan at the same time are a powerful stimulus and powerful base for moving to fulfill the goals and tasks established by the 12th party congress for the 1981-1985 five-year plan.

The rates for the next five-year plan are determined in such a way as to provide an accentuation of the quality aspects of social-economic development as well as the process for reorganizing industry, taking into account the requirements for saving on energy resources and raw materials. In this regard it is graphic that in 1981 around 35 percent of industrial goods production will have to be obtained through better utilization of raw materials and improvement in technologies.

The guidelines and tasks drawn by the party's secretary general in his speech at the recent RCP Central Committee plenum, the measures adopted by the plenum and the laws voted by the Grand National Assembly have as their major coordinate the firm and consistent application of the principles of the new economic-financial mechanism for the faster increase in efficiency in all the economic units. Only on this base can we have available greater opportunities for general development and for raising the material and spiritual standard of living. If everything we have accomplished until now is the result of our people's continuous work, since we have not received anything free and readymade, then it is also clear that in the future the base for general prosperity can only be tireless and productive activity for increasing and modernizing the production forces.

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PROVISIONS OF 1981 BUDGET EXPLAINED

Bucharest REVISTA ECONOMICA in Romanian No 52, 26 Dec 80 pp 10-11

[Article by Theodor Stolojan of the Ministry of Finance]

> [Text] On the basis of the 16-17 December RCP Central Committee Plenum Decision, the recent Grand National Assembly session adopted a series of laws and measures aimed at firm application of the directing lines drawn by the 12th party congress, guidelines which fully correspond to our society's interests and which assure Romania's steady move along the path of progress and civilization. It is a question of the laws on the 1981 state budget; investments, bringing the production prices up to date and improving them on economic principles, the delivery of products to the socialist units as well as improvement of production prices, contracting and acquisitions in agriculture; change and completion of the Law on Management of Fixed Assets, Material Resources and Material-Technical Supply; strengthening worker self-leadership and economic-financial self-management and monetary self-management in foreign trade activity and international economic cooperation; the establishment, distribution and use of resources by counties for supplying the population with meat, milk, vegetables and fruit as well as reports presented on concluding the action to raise salaries, pensions and state allocations for children and other incomes and supplying the population for the fourth quarter of 1980 and first half of 1981.
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> Starting in this issue, REVISTA ECONOMICA will publish a cycle of articles which explain the content of these laws and bring out their importance for the country's social-economic development and for raising the well-being of all the people and for improving the legislative framework in accordance with the provisions of the new economic-financial mechanism.

The provisions of the 1981 state budget have at their base the proposals from the budgets of incomes and expenses of the enterprises, centrals and other socialist units, multiple and complex analyses made at the level of the ministries, executive committees of the county and Bucharest municipal people's councils, Ministry of Finance, banks, other general central organs, with a view to setting the size of financial resources at the level of the maximum possibilities of the economy and expenses in a strict savings program.

Budgetary Balance

The state budget for 1981 is balanced, amounting to 313.6 billion lei for incomes and expenses, with a 6.3-percent increase over 1980. Along with the socialist units' own assets, this budget provides the financial resources needed to fulfill all the goals and actions for the country's social-economic development and to raise the standard of living forecast by the plan.

The main features of the 1981 state budget are as follows:

First, the volume and structure of the state budget for 1981, the first year of the next five-year plan, reflect the higher financial-economic potential of the national economy as a result of the powerful increase in material production in the 1976-1980 five-year plan and the high rate of increase in the national income--the sure foundation for social-economic development and for raising the standard of living for all the people--as well as continuing to keep sustained economic growth for 1981.

Second, the incomes and expenses for the 1981 state budget, just as the overall financial resources and expenses of the national economy included in the centralized financial plan, reflect the accentuation of the contribution of intensive factors to economic growth and increase in efficiency in all areas. The volume of investments for 1981 actually is at the level of 1980 and the number of worker personnel will increase by just 50,000 in 1981 compared with the 200,000-250,000 which was the annual average increase until now; the consumption of raw materials, materials, fuel and energy are forecast to increase much more slowly than the volume of production.

At the same time, the construction of financial balance, budgetary balance and balance of the balance of foreign payments for 1981, within the increase in the volume of foreign trade of 10 percent, has in mind a much more emphatic rise in export--21 percent. Not only hard currency resources will be provided in this way to pay for imports but the country's foreign debts will be reduced.

Third, the 1981 state budget is a concrete expression of the firm application of the new economic-financial mechanism at the micro- and macro-economic level, the principles of worker self-leadership and economic-financial self-management and the new relationship between the assets formed at the enterprises, centrals and other socialist units and the centralized assets of the state's monetary resources. What is significant is that in 1981 around 50 percent of the national economy'sfinancial resources will be concentrated in the budget (compared with 74-78 percent in 1975-1978), providing for the continued growth in the assets belonging to the enterprises and the centrals and other assets established in the economy. Utilization of all the financial assets, regardless of the level at which they are formed, is carried out only in a planned way, under strict control, on the basis of the provisions of the budgets of incomes and expenses of the socialist units, the state budget, the centralized financial plan and the credit plans.

Fourth, the 1981 state budget reflects the effect of introducing the single commercial exchange in foreign trade activity, starting 1 January 1981, expressed in lei and of reducing military expenditures, administrative and other expenditures from 1980, and of unifying the expenditures at one year for increasing salaries in stage II, which were applied in the preceding year by being spread out.

Also, the state budget for 1981, just as the economic plan, is worked out under conditions of the prices and tariffs in effect on 31 December 1980, and it will have introduced the effects of applying the law on bringing up to date and improving the correlation on economic principles of production prices and delivery of products to the socialist units as well as production, contract and acquisition prices in agriculture and the law on strengthening worker self-leadership and economic-financial and currency self-management in foreign trade activity and international economic cooperation as well as other measures on the organization of the activity of educational, health, cultural and other units on the principle of self-management.

At the Basis of Achieving Incomes--Quality in Economic Activity

In accordance with the basic nature of our socialist system, the overwhelming majority of the state budget incomes for 1981--that is, 99 percent of their total—comes from the activity of the socialist units and the net income created by workers in material production.

Incomes from drawing out a portion of the value of net production for society as well as deposits from the state economic units' profits and tax on the circulation of goods and tax for use of state property use total 214.4 billion lei, representing 68.4 percent of total budgetary incomes. In order to achieve these budgetary incomes under good conditions, which are 10 percent higher than last year, as provided in the Law on Adoption of the State Budget for 1981, the enterprises, centrals, ministries, executive committees of the county and Bucharest municipal people's councils, with the aid of the financial-banking organs of the central overall organs and banks, must take energetic measures for total fulfillment of the plan indicators, especially physical production, net production, export, profits, through maximum utilization of production capacities, reduction in the consumption of raw materials, materials, fuels and energy, better use of the labor force, firm implementation of the programs to increase labor productivity and reduce production and circulation costs. As indicated by the party's secretary general, President of the republic Nicolae Ceausescu, and as the RCP Central Committee Plenum of 16-17 December 1980 decided, it is necessary that each work collective give particular importance and take action to fulfilling the tasks for supplementary reduction in production and circulation expenditures so that, as much as possible, the effect of increasing production and delivery prices to the socialist units are compensated for raw materials, materials, energy and fuel.

At the same time, in the particularly favorable framework which is to be created to strengthen economic-financial self-management in each unit of the economy, by bringing up to date and improving the correlation of production prices and delivery prices, on economic principles, for the products to the socialist units as well as production, contract and acquisition prices in agriculture, it is necessary for the enterprises, centrals, ministries, other central organs, executive committees of the county and Bucharest municipal people's councils and financial-banking organs to assure strict respect for the provision of the Law on Finances and other normative acts referring to the formation and utilization of their own assets and to making deposits to the state budget.

It is necessary for the economic units to take action with all determination in order to prevent the appearance of some shortcomings, as occurred in 1980, when some enterprises froze their circulating resources in stocks of material beyond what was needed, products without assured sales, and they did not achieve the planned financial resources, being forced to appeal to supplementary bank credits with costly interest, in order to finance the planned development and being forced to reduce the level of their own assets.

Taxes from the population, forecast in the state budget for 1981, represent 3.1 billion lei, that is, 1 percent of the budgetary incomes.

Setting the Size of Expenditures Strictly

The expenditures of the state budget for 1981 are set in size in the spirit of a strict program of savings and represent the maximum limits which cannot be exceeded.

Within the expenditures for financing the national economy, the allocations from the budget for investments are around 99 billion lei. These large assets predominantly are intended for investment projects currently being carried out. In this regard we stress that around 95 percent of the volume of investments for 1981 are projects being continued and only 5 percent are new projects.

In the area of investments, the enterprises, centrals and all organs involved in the investment process have the task of steadfastly applying the guidelines and indications of the party secretary general and president of the republic, Comrade Nicolae Ceausescu;the provisions of the Law on Investments and the Law on Adoption of the State Budget for 1981 with regard to carrying out the investment projects planned on schedule, concentrating efforts on putting the projects into operation within the planned schedule, projects upon which are dependent the fulfillment of production, starting new investment jobs only under conditions of full utilization of existing production capabilities, reducing the cost of the projects and shortening the length of time for carrying them out, reducing tie-ups in unfinished investments and in equipment in stock and being assembled. Special attention must be given by the enterprises and centrals to achieving their own resources for financing investments and paying back credits received for investments from profits, amortization and other resources. The financial-banking organs, together with the socialist units, have the task of strengthening discipline and commiting investment capital, of seeking and assuring strict respect for their purpose and assuring an increase in the efficiency of investment capital.

Large assets from the budget are being allocated to cover the need for circulating resources at the economic units which will go into operation in 1981, for financing scientific research, prospecting and geological projects and other economic actions.

Reflecting the deeply humanist nature of the party and state policy and the permanent concern with raising the standard of living for all the people and with satisfying the basic needs for education, health protection, rest, culture, social security and other social needs, the expenditures for this purpose represent 24.1 percent of total budgetary expenditures. Compared with 1980, they are 5.6 percent larger. Expenditures for financing social-cultural actions supported by the state budget for 1981 will be 10,350 lei average per family. Apart from these state budget funds allocated for social consumption, workers in 1981 also will benefit from their own funds for this purpose which are established from the profits at the socialist units.

In accordance with the provisions of the Law on Adoption of the State Budget for 1981, the state institutions, ministries, other central state organs, committees and executive bureaus of the people's councils have the duty of assuring the good operation of the units with social-cultural activities and, in collaboration with the financial-banking organs, they must seek wisely-managed utilization of the existing material base and fulfillment of the plan tasks with a minimum of expenditures.

As indicated by Comrade Nicolae Ceausescu at the RCP Central Committee Plenum of 16-17 December 1980, normative acts are to be finalized in the first quarter of 1981 for moving the social-cultural institutions to the principle of self-management, requiring decisive actions to increase their own profits, upon which these units are to cover their expenditures to the greatest possible extent.

The organs of collective leadership in the economic units, in accordance with the law, are required to bring into the discussion of the workers general meetings the budget of incomes and expenses, to establish the measures necessary to fulfill all the economic and financial indicators and the tasks for supplementary reduction in production expenditures and to raise labor productivity and to have total fulfillment of the payments from profits and other payments to the state budget. Also, these organs are required to permanently follow up on the way in which the provisions of the budget of incomes and expensesare being fulfilled and to take energetic action to prevent the appearance of any shortcomings.

Special tasks resulting from the Law on Adoption of the State Budget for 1981 belong to the Ministry of Finance, the banks and the entire financial-accounting apparatus of the economy, who must improve their activity, take action with all firmness to have complete achievement of financial resources in the economy and incomes of the state budget, to strengthen responsibility in effecting any expenditure, to strengthen preventive financial control and plan and financial discipline at all links, to increase efficiency in the economy, to permanently assure financial and budgetary balance and balance of the balance of foreign payments, under the conditions provided by the plan.

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CURRENT, FUTURE ENERGY POLICY REVIEWED

Bucharest REVISTA ECONOMICA in Romanian No 52, 26 Dec 80 pp 12-13

[Article by Prof Vasile Nitu]

> [Text] Having entered among the priority concerns of mankind in the decade which is ending, providing the need for energy undoubtedly will keep this leading spot not only in the years and decades which are coming, being to a great extent a condition for economic growth and stability in the future. Specialists feel that no anti-inflation effort, no sustained policy of economic growth and no plan for organization of the international monetary system will be able to survive if the current energy situation is not overcome. Energy policy has become a basic component of all the countries' economic policy, whether they are importers or exporters of energy, whether they are developed or developing, and they are faced with problems of adaptation undreamed of just 10 years ago. Among these are broadening of their own energy base, at the price of some considerable changes in its structure, and saving--a profitable investment if we take into account that development of the entire economy depends on it--including by restructuring the branches according to the criterion of energy consumption, are concerns which are extremely current.
>
> Awareness of the increased economic interdependence among countries, brought out to a great extent by the energy crisis, brings out more and more the role which could be placed by solidarity and international cooperation in facilitating the restructuring mentioned, which has become inevitable, so that their economic and social cost burdens development as little as possible.

The energy policy promoted consistently by our country, particularly in the last three five-year plans, even before the appearance of certain restrictions at the world level imposed by the energy crisis, has led to measures of management and rational utilization of energy, strict saving and superior utilization of it. Even before 1973 an important action of energy policy took place with a pioneering spirit at the world level and intended to further provide high rates of development for the entire national economy. It was grandly crowned with the compilation of the program-directive for research and development in the area of energy for the 1981-1990 period and main guidelines up to the year 2000, on the initiative and under the direct guidance of the party's secretary general, a document of exceptional importance for the country's social eand economic progress which seeks to assure rational development of the energy base in close agreement with the needs of the economy.

Options and Efficient Guidelines for Saving Energy

As we know, in the years of socialist construction, particularly in the last three five-year plans, the national economy has seen a complex development at rates which are among the highest recorded in the world. Even in this framework it should be noted that in Romania, following a first period in which the increase in energy consumption was dominated by the rise in industrial production and in national income--corresponding to a powerfully energy-intensive stage of building and developing some basic industrial branches--a continuous reduction in energy consumption has been determined in relationship to the level of overall indicators of economic development. Thus, whereas in an initial period the average annual growth rate in energy consumption was more than 1.3 times greater than that of increase in industrial production and national income, in recent years, as a result of the measures taken, the ratio between energy consumption and national income and total social product was reduced to values approaching those in the economically developed countries.

Table 1: Evolution of Ratio Between Energy Consumption and National Income in Romania

	Percents	
	1970/1965	1976/1970
Total social product	152	175
National income	145	184
Energy consumption	153	142
Total consumption of energy/social product	1.01	.82
Energy consumption/national income	1.06	.79

Simultaneously a permanent improvement was sought and achieved in structure of primary energy resources, for this purpose promoting coal and hydraulic energy with a view to reducing the share of liquid and gas hydrocarbons. It is gratifying that Romanian energetics has been distinguished by rates of production of energy carriers--coal and hydroenergy--which are higher than the world rates (Table 2). This has meant allocating a greater share of national income for geological research, mining activities and development of the industries attached to these branches and for the development of an energetics less subject to fluctuations of the foreign market.

Table 2: Rise in Production of Energy Carriers in the 1960-1978 Period (%)

	1960	1965	1970	1975	1978
		At world level			
Coal	100	109	116	126	133
Crude oil	100	144	216	251	281
Natural gases	100	151	231	283	287
Hydroenergy and nuclear-electric energy	100	135	181	262	302
		In Romania			
Net coal	100	143	240	295	303
Crude oil	100	109	116	127	119
Natural gases	100	168	240	316	338
Hydroenergy	100	253	698	2,194	2,680

Source: "UN Statistical Yearbook" and "RSR Statistical Yearbook 1960-1975."

But, despite the fact that providing the need for fuels and energy to a greater and greater extent from domestic resources represents a basic constant of our country's energy policy, energy needs are only satisfied partially by domestic production. Given the fact that following an inventory of native reserves of carriers of primary energy the conclusion was reached that currently known available resources of hydrocarbons are limited, the necessary alternative to continuing or increasing imports at high rates must be achieving substitutes, increasing the share of inferior coal and new sources of enerty (nuclear, solar, geothermal and so forth) and generally broadening our own energy base and saving and utilizing it on a high level.

Large reserves for saving energy are found in the fact that in our country the existence of a surplus balance of petroleum products during a certain period permitted the development of some energy- intensive industries. These industrial branches represented around 50 percent of the industrial production but considerably more with regard to energy consumption: Metallurgy and chemistry alone consumed more than 55 percent of the energy resources needed for industry. That is why our energy policy takes into consideration for the future years a certain restructuring in the development of industry, placing a more powerful emphasis on those branches which consume less and produce more valuable, highly-technicized products. The problem is of particular importance also if we think that whereas it is true that specific consumption of energy per unit of national income was reduced from 3.98 kg of conventional fuel per $1 in 1973 to 2.78 kg of conventional fuel per $1 in 1976, it is just as true that in a number of countries this consumption is much lower.

Structural Changes at the Base of the Superior Utilization of Energy

Taking into account the current and future goals for development of the national economy and the limited potential of the geological reserves we have available, in the context of the increasingly greater difficulties being encountered in acquiring energy carriers on the world market, the program-directive formulates Romania's energy independence as a strategic goal of the next decade, having great significance for our country. Fulfillment of this goal means affirmation of a new feature of the country's energy policy, for the implementation of which the entire nation's efforts are being mobilized on a broad scale.

First, it is a question of the development of geological research, deep exploration of all the country's zones with a view to broadening the energy base by discovering new deposits of coal, crude oil, gases, radioactive substances and so forth.

Special attention is being given to changing the structure of the balance of fuel in favor of utilizing hydroenergy potential and solid fuels on a substantially broader scale and attracting new forms of energy--nuclear, solar, wind, geothermal, biogas, wave energy , which are being less utilized at present--with a large share in assuring the energy need. Together with the energy resources recovered, nonconventional sources of energy will have a 10-percent share in electric energy production at the 1990 level. On this base a substantial reduction in hydrocarbon consumption is being sought (Table 3); crude oil and gas extraction will be limited, however considerably increasing the final factor of recovery of crude oil from the deposits.

Table 3: Evolution of Sturcture of Electric Energy Production (%)

	1970	1975	1980	1985	1990
Electric energy production,of which the following represent ___%:	100	100	100	100	100
Hydroelectric	8.0	16.2	17.6	20.0	24.0
Nuclear-electric	—	—	—	—	17-18
On coal and combustible shale	27.7	27.8	40.0	55.0	44.0
On hydrocarbons	61.6	53.2	39.7	20.0	5 -4
On solar energy, other new sources of energy and energy resources recovered	2.7	2.8	2.7	5.0	10.0

Specifically, the measures adopted are intended to intensify the hydrocentral arrangements on the Danube and interior rivers as well as the microhydroelectric centrals, which brings an increase in utilization of the national hydroenergy potential from 30 percent in 1980 to 45 percent in 1985, to 65 percent in 1990, reaching near 100 percent around the year 2000. Rapid increase in lignite production, which will reach 75 million tons in 1985 and extraction of combustible shale is correlated with broadened use of these fuels instead of hydrocarbonsin the thermoelectric power centrals. The program for building nuclear power centrals has in mind the installation of a power of 660 MW in 1985 up to around 10,000 MW in the year 2000.

Large efforts are intended for modernization and improvement in the structures of industry, which holds the greatest share of more than 80 percent in the country's primary energy consumption, placing a more powerful emphasis on those industrial branches which consume less energy and fuels and produce products of high values, with a high degree of technicalness. Taking into account that one unit of energy consumed in machine construction a production of 11 times more than is achieved in metallurgy is achieved and around 9 times more than in the building materials industry, it is taken into considerabion that while the machine building industry develops at an average annual rate of 10.7-11.7 percent, that of ferrous metallurgy should grow 7.5-8 percent annually, while the building materials industry should grow 5 percent annually. In the same framework it also should be specified that in the next five-year plan much attention is being given to extending the small and handicrafts industry.

The problem also is posed in structures within the industrial branches, where priority is being given to the subbranches which assure superior processing and highly technical products such as electronics, precision mechanics, manufacture of technological equipment (in machine building), the production of medicines, dyes and organic dyes, paints, cosmetic articles (in chemistry). Favorable changes in structure also are being recorded in some groups of energy-intensive products--steel laminates, chemical fertilizers, plastics, aluminum products--to which greater increases are being given under conditions of relatively modest evolution in production in assortments with high economic efficiency.

Important changes in the current structure of energy consumption, in the direction of reduction and superior utilization, will be accomplished as a result of introducing new and modernized technologies on a broader scale: In iron and steel, for example, steel production obtained in converters with oxygen-blast will increase to 60 percent by 1985 and continuous casting will be extended; in cement production of 1985 the share of dry procedure will rise to around 95 percent; nuclear technologies will be introduced for energy production, for capturing and utilizing solar, wind energy and biochemical technologies.

All these directions of actions, as well as the others included in the program-directive are intended throughout the 1981-1990 decade to assure a minimum 40-percent reduction in average indicator of energy consumption per 1,000 lei industrial production, while a reduction of this indicator of at least 2.6 times compared with 1980 will be achieved by the year 2000.

Thus, achievement of Romania's economic independence is a complex goal whose implementation requires amplification and concentration of the efforts of all the factors involved.

8071
CSO: 2700

PARTICIPATION OF MARITIME INDUSTRY IN FULFILLMENT OF EXPORT PLAN

Bucharest REVISTA ECONOMICA in Romanian No 50, 12 Dec 80 pp 3-4

[Article by Ioan Georgescu: "The Ship Industry's Participation in Fulfilling the Export Plan"]

> [Text] The efforts that the working people throughout the economy are making, in these last weeks of the year, to fulfill all the targets of the 1980 plan have, among the priority objectives, the achievement and delivery of the production for contracts with foreign partners, the utilization of the possibilities of additional exportation. The fulfillment of the instructions given in this regard by the secretary general of the party, Comrade Nicolae Ceausescu, at the work conference of the RCP Central Committee on 3-4 December will help to balance the balance of payments, to increase the valuta resources for procuring the raw materials and other products needed for the economic activity in 1981.
>
> Many enterprises and centrals and the industry of whole counties have reported the early fulfillment of the export tasks for the five-year period. This demonstrates our national economy's capacity to participate competitively in international exchanges, the high level of the performances of a wide and varied range of products that it offers.

Shipbuilding is also numbered among the industrial sectors that are contributing a bigger and bigger share to spreading to the corners of the globe the good reputation that the inscription "Made in Romania" possesses. Benefiting from large investments for developing its technical-material and technological base, from the possibilities created in the branches with which it cooperates, for providing the materials and equipment needed, and from a suitable research and design potential, the Romanian ship industry--in which over 30,000 working people now work--produces each year sea and river ships and boats totaling a displacement of hundreds of thousands of tons. In the current five-year period, the annual volume of exports of ships and ship's equipment is 3-5 times higher than that in 1960.

The ship industry's central, with headquarters in Galati, contains in its structure eight shipyards (Galati, Braila, Constanta, Oltenita, Drobeta-Turnu Severin, Giurgiu, Mangalia and Tulcea), three enterprises for subassemblies for shipbuilding (the Ship Enterprise for Propellers, Castings and Forgings and the marine engineering enterprises in Galati and Constanta) and the Galati Research and Design Institute for Shipbuilding (ICEPRONAV). We note the fact that all the shipyards in the central are suppliers of products for exportation.

In achieving its highly complex products, the central's units involve many units in various industrial branches and subbranches, such as the Resita Machine Building Enterprise and Bucharest "23 August" (for diesel engines in a varied range of powers and speeds), the Resita-Renk Joint Production Society (for reduction gears), the Bucharest Electric Machine Enterprise and Craiova "Electroputere" (for generators and electric motors), Cluj-Napoca "Tehnofrig" (for refrigerating and conditioning plants), Iasi "Tehnoton" (for radio-communication equipment) and so on.

The list of products has been greatly diversified. Thus, regarding sea ships (for which the achievements have risen from a volume of 9,000 deadweight tons in 1960 to over 500,000 deadweight tons at present), the following families stand out:

Freighters of 2,400, 4,800, 8,700 and 15,000 deadweight tons;

Freighters of 15,000, 18,000, 55,000 and 65,000 deadweight tons for bulk goods;

Roll-on/roll-off ships of 4,800 deadweight tons;

Tankers of 5,000-150,000 deadweight tons.

At the same time, the production of river ships has been greatly developed, especially with the modern types of technical and service ships. At present, the Romanian shipyards produce:

Self-propelled barges of 1,000, 1,500, 2,000 and 3,000 tons;

Tugs of 2 x 400 horsepower, 2 x 800 horsepower, 2 x 1,200 horsepower and 3 x 1,200 horsepower;

Passenger ships with 80, 150, 200 and 300 spaces;

Other technical and service ships, such as dredgers, scows, floating cranes, and various platforms for hydraulic-engineering work, of a varied capacity and technical complexity;

River motorships for general goods, used for navigation in inland or coastal waters.

In the 1970-1980 period alone, the number of river ships launched rose by a factor of 1.35, there corresponding to it a rise in the total transport capacity by a factor of 1.4 and in the installed power (in horsepower) by a factor of about 2.

Among the achievements in recent years, one should note particularly the high-capacity tankers built in the Constanta Shipyard, the multipurpose freighters (for general goods or containers) of 15,000 deadweight tons and 18,000 deadweight tons, equipped with Resita-MAN /expansion unknown/ semirapid engines of 8,000 horsepower, line freighters (general goods and semicontainers) of 15,000 deadweight tons built in the Galati Shipyard, the offshore drilling platforms and the supertrawler-type fishing vessels—true floating factories, equipped with technological lines with an advanced degree of automation.

Ship production's degree of integration--although it depends to a large extent on the manner of formulation of the order by the foreign customers--has nonetheless risen continually. In this regard, action has been taken primarily by specializing the production of the shipyards, which have thus mastered well certain families of ships, so that, starting from the basic types, it is possible to turn relatively easily to designing the variant requested by the partner. We mention in this context that the Ship Central can fill orders for ships with a displacement of up to 250,000 deadweight tons.

Creative Effervescence Resulting in "Ideas of Millions"

The close education-research-production collaboration, facilitated by the existence of the specialized technical faculty, the research and design institute (ICEPRONAV) and the industrial central in the same city, Galati, provides the flexibility needed for satisfying as well as possible the highest requirements. ICEPRONAV achieves about 95 percent of the technical documentation needed for all the ships built in the central's yards.

The most graphic example regarding the way in which the problem of the integration of shipbuilding is viewed is the path traveled by the Romanian invention concerning the technology for making ship propellers, to its going into practice. The necessity of economizing the significant valuta funds that were allocated for procuring through importation the propellers of special alloys, capable of resisting cavitation and strong erosion, having dimensions (diameters) of up to 9 meters and a weight of many tons, stimulated our own research along the line of obtaining the high-speed alloys. The success registered by the research through the achievement of an original technology, patented as an invention, found immediate applicability, the design being developed to the level of the strong Ship Enterprise for Propellers, Castings of Nonferrous Metals and Castings and Forgings of Iron in Galati, which is situated at the highest technical level known in the world. Firms in Japan (the biggest shipbuilder in the world) are interested in developing industrial cooperation with the Galati enterprise. Thus, a contract on collaboration for 10 years, for mutual exchanges of technology and of information about the innovations in metallurgical processes, has been concluded with the firm Nakashima Propeller Co, Ltd, of Okayama.

The institute possesses an integrated design data-processing system for shipbuilding, which, starting from the parameters furnished in the foreign order, permits the dimensions, form, metal structure and so on to be determined in the optimum manner, going as far as obtaining the punched tape needed for numerical control of the cutting machines.

Among the objectives pursued with priority in research and design, which, at the same time, constitute the strong points in the competitiveness of the central's exported products, we mention:

The obtaining of maximum propulsive efficiency, by optimizing the ship's construction (form), with direct consequences for the installed power required and, respectively, for the energy consumption;

The optimization of the ship's metal structure, in order to reduce the metal consumption;

The continual renovation of the manufacturing technologies, in order to reduce the specific consumptions, shorten the production cycle and increase the labor productivity, with an influence on the economic efficiency;

The achievement of the prototypes of ships and equipment with the direct participation of the designers, which permits the shortening of the periods of assimilation and accuracy in execution.

The hydrodynamic characteristics of some subassemblies with regard to drag, self-propulsion, maneuverability, oscillations and so on are tested within the institute in specially prepared basins and on special test equipment.

The following are among the new types conceived by ICEPRONAV that will go into manufacture in the next five-year period: the air-cushion ship (of the Hovercraft type), which will develop a speed of 55-65 km per hour; new types of modern roll-on/roll-off ships adapted for traffic on the Rin-Danube-Black Sea route; marine pilot boats; various other types of technical and port-service ships; self-raising drilling platforms; cruise ships; and so on.

An active policy of alignment with the international standards in shipbuilding is provided by the collaboration, as early as the phase of conceiving the new products, between ICEPRONAV and the Romanian Register of Shipping (RNR). The technical documentation for the ships and for the machines and installations that are to be built in order to equip them is sent to the Romanian Register of Shipping for examination and approval. The verification involves the respecting of both the RNR's rules and the international agreements in the field of navigation. The technical supervision by the RNR does not stop here but continues at the shipyards and in the equipment factories, it being distinct from that exercised by the fitter or builder. As a result of the systematic collaboration with a large number of similar organizations abroad (Lloyd's Register of Shipping, the American Bureau of Shipping, Nippon Kaiji Kyokai, Det Norske Veritas, Bureau Veritas, the registers of the socialist countries, Germanischer Lloyd, the Hellenic Register and so on) and on the basis of its own research undertaken, the RNR's rules are constantly improved, thus becoming an efficient instrument for promoting technical progress in shipbuilding, for ensuring the safety of the ship and the ship's equipment. All vessels navigating under the Romanian flag are listed in the Romanian Register of Shipping and receive certificates conforming to the international agreements on the protection of life at sea, the loadline, the tonnage, the safety of containers and so on. The prestige that the RNR enjoys abroad is also transferred, implicitly, to the Romanian products made in accordance with its rules. The close collaboration between ICEPRONAV and the RNR cause, as early as the design phase, the alignment with the international standards for manufacturing and navigation to be considered with all possible attention, whence also the capacity for prompt, flexible adaptation to the requirements of the foreign partners.

Exportation of Goods and Services

The exportation of ships is done by the "Navimpex" specialized foreign trade enterprise, subordinate to the Galati Ship Central. Despite the unfavorable situation on the international market in recent years, the exports of "Navimpex" have risen by a factor of over 2.5 in this five-year period, including the exports through the relation of free exchanges more rapidly.

One characteristic of the evolution of ship exports in the current five-year period is the relative decline in supplemental imports--by 50 percent in terms of value in 1980 as compared with 1976--under the conditions in which the number of ships exported each year has risen greatly and the orders in series production are rare. This illustrates graphically the fact that the concerns along the line of the assimilation of modern installations for radio navigation and for automation of the operation of the ships, equipment for loading and unloading, and so on have permitted the growth of the degree of integration in ship production, with a positive influence on the net valuta contribution of the exports.

Among the main trade partners in recent years we mention: the USSR, the People's Republic of China, Egypt, Bulgaria, Norway, Czechoslovakia, Greece, India, Yugoslavia, Japan, Albania and Poland. At the same time, through our ship industry's participation in developing Romania's merchant marine, it is making a significant contribution to developing the country's invisible trade.

The increase in the number of seagoing merchant ships by a factor of over 2 and in the total tonnage (from 1.3 million tons in 1976 to 3.6 million tons in 1980) in the current five-year period causes Romania to be situated, at present, among the top 15 countries in the world with regard to the capacity of the merchant fleet. The fulfillment of the provisions for the 1981-1985 five-year period with regard to doubling the current capacity of the Romanian merchant fleet will permit most of the merchant-marine transportation of our country to be done with its own resources.

Remaining in the sphere of invisible trade, it should be mentioned that the object of activity of the "Navimpex" ICE /foreign trade enterprise/ includes a wide range of engineering services and marketing of rights of industrial and intellectual property, service and technical assistance.

The good technical equipment of the Romanian shipyards permits them to make high-quality repairs on practically any type of merchant ship, even in the short period of docking for loading and unloading in our ports. The wide range of equipment and subassemblies manufactured by domestic industry makes it possible to easily replace components in the Romanian ports, with the assistance of highly qualified specialists of the central.

The experience acquired by the ship industry's central confirms once again that the success of Romanian exports, the competitiveness of our products, is caused to a high degree by the potential of Romanian scientific and technical creation, by the achievement of products with high technical and economic parameters, by the continual growth of the list of products.

12105
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DELAYS IN FULFILLMENT OF CONTRACTS IN METALLURGICAL INDUSTRY

Bucharest SCINTEIA in Romanian 27 Nov 80 pp 1, 3

[Interview with Gheorghe Deliu, deputy minister of the metallurgical industry, place and date unknown, by Corneliu Carlan]

[Text] Recently, SCINTEIA published a series of investigations on the subject of preparations for production in 1981. One of the conclusions of these investigations referred to the fact that contracting for metals for the first half of 1981 is much behind schedule, which is creating difficulties for both producers and users in preparing next year's production. In continuing our investigations, we are today presenting the point of view of the responsible forum regarding the causes for the delays in beginning contracting for metals and the measures that are being taken to begin and quickly conclude these actions. This is the subject of the interview with comrade Gheorghe Deliu, deputy minister of the metallurgical industry.

[Question] Comrade minister, you have read in SCINTEIA the problems pointed out by comrade Mircea Rogojinaru, the commercial director of the Galati Steel Combine, regarding the shortcomings in providing the technical-material base for the coming year's production. As you well know, the solution of this problem exceeds the competency of the combine. Why do we have this exaggerated delay in contracting for metal?

[Answer] At the present time, the solution of the supply problems pointed out is well underway. The delay in balancing the material reserves for the principal raw materials is due to the fact that the responsible organs, the Ministry of Supply and the State Planning Committee, have just now found, in the month of November, the solutions for providing the quantities of raw materials through imports. But, the Galati Steel Combine must move towards contracting for quantities of raw materials, ferroalloys and coke that can be obtained domestically and for which allotments were issued back in September.

[Question] When were these material reserves finalized?

[Answer] In the middle of this November. And, the quotas were immediately sent to the consumers.

[Question] A Galati Steel Combine representative stated that the delays in contracting for metals did not allow the Combine to estbalish the necessary amount of ferroalloys, which will have repercussions upon the flow of production in the first part of the year...

[Answer] Through the approved schedules, we are in a position to provide ferroalloys to metal producers in accordance with the basic programmed types of ferroalloys. The combine in Galati has a series of traditional consumers to which it delivers the same types of steel plate. Therefore, the problem does not arise where these consumers will not have steel with which to work in the first month of the year. The problem arises only with regards to the production of certain "specialty items" that have a long production cycle.

[Question] Specialty items, specialty items, but necessary items since if the Galati Steel Combine does not produce them they must be imported. Or, if they are not produced in January or February it means that consumers will not have them during those months. Closely related to this, we would also like to discuss the following point: the provision of certain basic raw materials depends to a large degree upon the actions that are taken to reduce consumption. If you consume less, imports will also be down, especially for coke and electrodes. Why was the programmed level of consumption for coke and electrodes exceeded this year on an average of 20 percent, and what is foreseen for strictly staying within the standard consumption norms in 1981?

[Answer] It is true that the consumption levels for coke were exceeded. But, the steel making industry did not have the conditions in order to stay within the norms because the importer for coking coal and coke, MINERALIMPORTEXPORT. did not always succeed in bringing in raw materials of the quality required for production. More exactly, regardless of the quality of the coal or coke the importer considers his job completed as long as he supplies us with the programmed amount. For 1981, we have agreed upon certain quality standards for coke and coking coal so that the importer will have to supply us only with the qualitatively appropriate raw materials. Under these same conditions, we are also to be supplied with iron ore.

[Question] And in this manner you will be able to stay within consumption norms?

[Answer] ...Only if we are able to ensure the material conditions for carrying our repairs on the caupers. Thus, we will be able to raise the temperature of the air to the optimum level when it is introduced into the furnace, reducing the consumption of coke. In this sense, we have undertaken actions that are required to obtain the necessary materials domestically and from imports.

[Question] Let us return to the electrodes which are... and are not, because consumption levels are being exceeded. Why are not the consumption norms for electrodes adhered to?

[Answer] The consumption rates for electrodes are different in our steel combines, depending upon the quality of the electrodes, the quality of the scrap iron and the skill of the steelworkers. Especially in the quality of the work of the steelworkers there is an explanation for the differences in consumption rates between the Hunedoara combine, where it is 8.8 kg of electrodes per ton of steel, the 12.3 kg/ton at Tirgoviste and the 15.5 kg/ton at the "Otelul Rosu" factory. With regards to the quality of the scrap iron, we do not see any improvement as long as legal provisions are not applied so that each economic unit sorts and prepares appropriately the metal sent to the steelworkers. In order to improve the quality of the electrodes, we have taken the appropriate supply measures with the Slatina Electrodes Factory, but the results will not be felt until the second half of the coming year.

[Question] This year the producers of pipe, also belonging to the Ministry of the Metallurgical Industry, did not receive regularly and fully the necessary quantities of billets from the steel combines. For that reason, there were also shortfalls in the production of pipes. Why, and even more, what will be the situation in 1981?

[Answer] Such a situation was caused by the existence of certain "bottlenecks" at the billet producers, at the steel combines in Resita and Hunedoara. We have taken measures to supplement production capacities and, in 1981, there will be no problems of the nature of those in 1980 regarding the supply of billets.

[Question] I would propose to you now to refer to the metal production sales situation in 1981. In two discussions with representatives from the "Grivita Rosie" Chemical Equipment Plant in Bucharest and the Galati Steel Combine the fact was revealed that, until now, there has been practically no contracting for quantities from the coming year's production, which would have repercussions upon preparations for economic activities in both units. Why has there been a delay in contracting for metals?

[Answer] Actually, most users made their requests for metal by variety and size-type on-time. But, they also made a series of later changes to their initial orders. Just now I received an order of this type from the Industrial Central for Chemical and Refinary Equipment, to which the "Grivita Rosie" Enterprise also belongs. Nonetheless, this did not block us from issuing allocations. The primary cause is the late, just a few days ago, finalization of export and import tasks for metal, as completed by the central organs involved. More precisely, we received the task of providing supplementary exports.

[Question] You received a supplementary value task for exports, not a quantitative task. In order to fulfill it, it is reasonable for you to offer for export types of steel of higher value. In other words, it is efficient for you to sell for export those products at an average price per ton close to that for a ton of imported metal.

[Answer] In order for us to produce higher types of metal we should have the adequate production capacities.

[Question] Comrade minister, there are other opinions, such as that metal production in 1981 should be more firmly directed towards the production of certain types of metal of high value, that are competitive in the export market. What guarantees are there that next year you will rigorously fulfill the program for starting production of types of metals for the naval industry, technological equipment and automobiles, which until this year have been imported?

[Answer] The programs to start production have been carried out appropriately so that we do not foresee serious difficulties with regards to the production of types of metals that replace imports and which, moreover, are included as resources in the metal reserves.

[Question] You have stated that certain modifications in the structure of metal reserves are a cause of the delays in issuing metal allocations. What other causes are there?

[Answer] Another cause was the disagreement between the larger demands for alloy steel from the users, especially in the machine building industry, and the 1981 plan tasks for these steels, which is lower.

[Question] When was the plan task for alloy steels completed?

[Answer] Two months ago. But, the requirement to reduce the consumption of alloy steel should not surprise the users since long ago the party leadership pointed out the ease with which designers in the machine building industry call for the use of alloy steel, sometimes justifiably and sometimes not, and the leadership asked them to revise designs and broadly promote constructive solutions of the basis of using carbon steel. If this was done on-time, there would have been no delay in balancing the metal reserves.

[Question] What is the status of the metal reserves at this time?

[Answer] The problems of balancing the metal reserves for the first half of 1981 were cleared up. They completed drawing up the production program for pipes and wire, the allocations were sent out and on 27 November of this year we begin to contract, which will be carried out at the producers' headquarters and will last until 17-20 December. The other allocations for metal will be sent out by the end of this week so that next week contracting can begin.

[Question] Actually, when do you think metal contracting will be completed?

[Answer] At the latest by 25 December.

[Question] But, the eventual precontractual misunderstandings will also have to be resoved!

[Answer] In the contracting that will be carried out in the main production units a representative of our ministry will be participating who will be able to promptly work to resolve precontractual misunderstandings. As far as I know, representatives will also be sent there from the user ministries, as well as the Ministry of Supply, so that no metal user will leave the producer without having had all the contractual clauses perfected.

[Question] In conclusion, how do you evaluate the current status of preparations for production in metallurgy for 1981?

[Answer] The current status of internal preparations for production ensures the necessary support for fulfilling plan tasks. In order to achieve the planned metal production we will have to closely pursue and provide the conditions to bring certain new facilities on-line on-time. The production from these facilities is being counted upon in substantiating the metal reserves, especially for the second half of the coming year. Another important problem: we are calling for a repair plan for main equipment and installations. Up to now, with regards to the supply of spare parts, there are still many problems to resolve, since the producers in the machine building industry are not accepting orders to produce certain items or are delaying concluding contracts. Despite all this, we feel that in 1981 we will handle our contracts with users better than we did in 1980.

[Question] In other words, your consumers can be put at ease with regards to metal supplies?

[Answer] Overall, no. There are some types of metals where we still have not found the answer to balance requirements with resources. We are continuing to seek the best solution.

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NEW DIESEL-ELECTRIC LOCOMOTIVE PRODUCED

Bucharest REVISTA ECONOMICA in Romanian No 49, 5 Dec 80 p 11

/Unattributed article: "A New Type of Diesel-Electric Locomotive in the Inventory of the Railroads"/

/Text/ The "Electroputere" Enterprise in Craiova recently began to produce a new type of diesel-electric locomotive with a power of 3,000 horsepower. A result of the research done by the specialists of the "Electroputere" Research and Design Institute, the new locomotive will be able to pull sets of both passenger and freight trains. Built with subassemblies and modern operating apparatus made by our industry--in an original design or on the license of prestigious foreign firms--the locomotive offers in operation, according to the trials and tests, a multitude of economic advantages, of which we note: the specific consumption of fuel at full load and that of oil below the established standards and the specific gravity of metal below 30 kg per horsepower (a figure that is situated at the level of the best achievements in the world).

Besides these advantages, the wear on the wheel rims and their flanges is very low, allowing one to expect their utilization without relathing for the distance of 300,000 km. In comparison with the locomotive of 2,100 horsepower, a standard locomotive for our railroads, that of 3,000 horsepower can pull almost double the tonnage on the same upgrades and at the same speeds.

For obtaining these performances, the locomotive is equipped with an R251 engine made by the Resita Machine Building Enterprise on the license of the ALCO Engines Division, United States, which develops a rated power of 2,900 horsepower at 1,110 rotations per minute with a fuel consumption (at 293°K and 736 mmHg) of 165 grams per horsepower and an oil consumption of only 1.7 grams per horsepower-hour; with an alternator of the type GST-1 (GSP 1,425 x 300-12) and 6 traction engines of the type MCT 542 x 320-6. It develops a continuous pull of 76/16 dynes and a maximum speed of 105-115 km per hour.

For good visibility and maneuverability, the signaling and control apparatus is positioned in the engineer's cab in such a way as to satisfy all the requirements. To provide optimum operating conditions, a refrigerator, an electric heater and a radiotelephone are also installed in the cab.

12105
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YUGOSLAV-CHINESE ECONOMIC COOPERATION IN 1981

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 9 Jan 81 p 3

[Article by N. Basic: "Better Structure of Trade--A Step in the Direction of Realism"]

[Text] In the year which has just begun Yugoslavia's economic development will take place in the context of stabilization, and China's development in the context of the policy of adaptation, which in the recent trade talks for 1981 had an impact on the restructuring of exports and imports between the two countries. This restructuring was also a reflection of an examination of the two countries' objective capabilities and a step toward actual fulfillment of the envisaged volume of trade so as to avoid the unrealistic relation between the trade that is planned and that which actually takes place, which has been the practice up to now.

The commodity lists for 1981, which were drawn up as indicative lists, provide for a total volume of trade of $300 million--$150 million in each direction. Trade between the two countries in 11 months of last year amounted to $146.5 million, $94.3 million of Yugoslav exports and $52.2 million of imports from China. We should also add that the value of our exports is considerably lower than actual deliveries, since more than 60 percent of the value of ships and marine engines delivered last year was collected in 1978 and 1979.

Examining the objective capabilities for exports and imports this year, both countries stated before the talks what could and what could not be entered in the commodity lists for 1981. The Yugoslav side, for example, requested that imports from China be expanded with certain new products (cotton, hemp, hemp fiber, rice, frozen meat, sugar-beet molasses) and also for increased imports of petroleum (from 100,000 to 300,000 tons) and raw and semitreated hides. The Chinese side was unable to accept any of these proposals, nor on the side of exports from Yugoslavia did it accept offers even of certain products which have been traditionally delivered to China, along with certain products which were offered and which up to now have not been delivered. This year, then, exports to China will not include copper sulfate, PVC and tractors, and exports of cellulose fiber and combines will be smaller than last year. Nor was the Yugoslav side able to accept certain requests of the Chinese side, above all for the export to China of sugar, corn, vegetable oils and nonferrous metals in ingot form.

The largest items in Yugoslav exports to China this year will be various machines and equipment (valued at $15 million), and then miscellaneous chemical products ($5 million), mixed fertilizers (50,000 tons), etc. The most important items to be delivered from China are textiles, feathers, pharmaceutical and chemical raw materials, and so on.

During the talks Yugoslav and Chinese specialists also met and on that occasion ascertained the possibility of importing coking coal of adequate quality from China. It was agreed that laboratory and industrial tests would be run in Yugoslavia on coal from those mines in China which have quantities available for export.

The Yugoslav side raised the specific question of further exports of ships to China, since in 1980 delivery of ships under the program contracted for in 1979 was completed. The Chinese side declared itself favorable in principle to continuation of cooperation in this field, but the question of whether this will take concrete form will depend on talks between Yugoslav shipbuilders and the trading partner from China.

Evaluating the results of the trade talks for 1981 we should bear in mind at the outset the factors referred to which this year will have a very essential impact on the economic development of Yugoslavia and China and which will have a restrictive effect on development of economic relations and on the restructuring of trade between the two countries.

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CROATIAN FOREIGN TRADE THROUGH NOVEMBER 1980

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 7 Jan 81 p 3

[Text] The specific features of Croatia's commodity trade with foreign countries in the first 11 months of 1980 are the high growth rates of exports over the previous year, which, however, have shown signs of slowing down in recent months. Exports are up 22.2 percent over the period January-November of last year and have reached a value of 50,828 million dinars. Imports are up 5.7 percent and amount to 99,664 million dinars. Coverage of imports by exports has improved from 44.1 percent in 1979 to 51 percent in 1980.

The Croatian Community of Interest for Foreign Economic Relations estimates that Croatia's exports for 1980 as a whole will be about 55,452 million dinars, and imports about 108,720 million dinars. The coverage of imports by exports would thus be about 51 percent, and the trade deficit about 53,268 million dinars.

The status of trade with the convertible area is more favorable than overall trade: exports are up 24 percent, and imports down 4 percent, which has resulted in a 19-percent lower deficit with this currency area as compared to the first 11 months of 1979. Exports to the convertible area amounted to 34,639 million dinars, and imports 78,822 dinars, so that exports cover 44.1 percent of imports.

Ratio Between Imported Materials and Equipment

Trade with the area in which payments are made under bilateral agreements is quite unfavorable however. The tendency from last year, when a considerable shrinking of the surplus occurred, has continued, so that in trade with the bilateral area a deficit of nearly 5 billion dinars has been recorded this year, and the coverage of imports by exports has dropped to 73.9 percent.

Though overall trends of exports are favorable compared to 1979 and the growth of imports has been quite moderate, it was not possible to achieve commodity trade in the amount set forth in Croatia's payments-balance position. According to the payments-balance position exports over the first

11 months should have exceeded 56 billion dinars, but they are 9 percent below what was planned. Imports were planned at 92.5 billion dinars, and actual imports are 8 percent higher than that, and that has resulted in a 34-percent larger deficit than envisaged in the payments-balance position.

Somewhat more favorable relations have been achieved in the convertible area, where exports were also down 9 percent, but imports were up only 3 percent over what was planned, so that the deficit with this currency area is 14 percentage points lower than for total trade.

An analysis of total commodity imports with respect to purpose shows that imports of manufacturing materials increased a nominal 14 percent, and here we should bear in mind the impact of petroleum imports, while imports of equipment were down 12 percent in nominal terms, and imports of consumer goods were down 5 percent. These trends brought about certain structural changes in which there was an increase in the share of imports of manufacturing materials in total foreign purchases--from 66 percent in 1977, 71 percent in 1978, and then 73.6 percent in 1979, to all of 78.4 percent in the first 11 months of 1980. The share of equipment dropped from 26 percent in 1977 and 17.7 percent in 1979 to 14.1 percent in 1980, and that of consumer goods from 8.6 percent in 1979 to 7.5 percent in 1980.

As for exports, according to the 11-month figures, the largest nominal growth among the export-oriented industries was recorded by the production of leather footwear and accessories--44 percent, and it was followed by production of electric machines and appliances--43 percent, finished textile products--43 percent, chemical products--36 percent, processed foods--34 percent, petroleum derivatives--32 percent, shipbuilding--21 percent, finished wood products--28 percent, and the manufacturing of chemical products--18 percent. The largest drop in exports was recorded in ferrous metallurgy, 16 percent, and there was a 6-percent drop in machinebuilding.

Smaller Imports, But Exports Also Down

The largest nominal growth rates of imports compared to 10 months of 1979 were for petroleum and gas--39 percent, and other increases were 34 percent for yarn and fabric, 8 percent for the products of ferrous metallurgy and 2 percent for heavy chemicals. A 20-percent drop was recorded in imports of the products of machinebuilding, a 20-percent drop for manufactured foods, a 16-percent drop for chemical products and a 17-percent drop for electrical machines and appliances.

In 11 months of this year Croatia imported 43.8 percent of the total from the advanced countries of the west, 33.1 percent from the developing countries and 23.1 percent from the socialist countries (16 percent of this from the USSR).

Exports of commodities from Croatia in 1980 were primarily oriented toward the advanced countries--40.7 percent, and then 36.7 percent to the socialist countries, and exports to the developing countries amounted to 22.6 percent.

The growth of Croatia's imports over the first 11 months of 1980 was 2 percent lower than the 8-percent nominal growth of Yugoslavia's imports over that period, and the growth of Croatia's exports was 10 percent below the 32-percent nominal growth of the country's exports. Croatia's share in Yugoslavia's total trade deficit is 31.4 percent. Croatia's share in the deficit with the convertible area is 31.2 percent.

7045
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NEW GAS, OIL SOURCES IN CROATIA

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[Article by Vjekoslav Subic: "Larger Gas Production"]

[Text] INA-Naftaplin of Zagreb has recently put three very important petroleum, energy and petrochemical installations into pilot operation. These are, first of all, the gas field at Molve near Djurdjevac in the Drava Valley--the richest gas field in our country and one of the richest in this part of Europe. Large quantities of gas are in this field at depths below 3,200 meters. So far 2.27 billion dinars have been spent to prepare this gas field for exploitation, which will yield about 300 million cubic meters of gas per year. Construction work on the large installation of the Molve I gas station began in February 1979, and installation of equipment this November.

Now that this first gas field has been put into operation, construction and installation of equipment have continued at the Molve II gas field, which as early as 1983 will be producing about 1 billion cubic meters of gas per year. Not only is this threefold more than the capacity of the Molve I gas field which has already been put into exploitation, but it is more than the present total annual production of gas from all existing deposits in Croatia.

The Kalinovac and Stari Gradec gas fields, which have just been found and developed, are linked to the Molve gas field.

A new gas refinery--the ethane installation at Ivanic-Grad, with a capacity to refine about 1 billion cubic meters of natural gases from all present gas fields in the Drava Valley region, is being linked directly to Molve in a production chain, we were told by Mavro Popijac, chief director of INA-Naftaplin. In that refinery, the most modern of its kind we have, ethane, methane, propane, butane, hydrogen and other components will be "produced" from natural gas. The ethane will subsequently be used in the installations of the new ethylene plant at Zitnjak in Zagreb, where about 90,000 tons of this basic raw material for the petrochemical industry will be produced every year. Other products of the refinery at Ivanic-Grad will be shipped to consumers for final consumption or to factories for further refining. Thus about 70 million cubic meters of methane will be delivered by the gas pipeline network to consumers in industry and households.

More Intensive Petroleum and Gas Explorations

According to what we were told by the chief director of INA-Naftaplin, these three petroleum-energy facilities constitute the most important achievements in the efforts made so far by the workers of that collective, who have oriented their exploratory work toward deeper strata of the Pannonian Basin between the Sava and Drava, since it is these deeper sediments that promise richer deposits of petroleum and gas. This justifies the intensified efforts, stepped-up operations and larger investments in exploring petroleum and gas in this region.

The workers of INA-Naftaplin have oriented their explorations in this direction since the justifiability of this orientation has in fact been confirmed by the Molve gas field. In order to make this work more effective, it will be necessary to purchase several special drilling rigs for drilling to depths greater than 5,000 and 6,000 meters. This equipment is very expensive, but it is indispensable, since it will also be used in the basin of the Dinarids, which is today the region that has been least explored.

The bed of the Adriatic is also giving a great deal of hope, especially concerning gas. All the results to date--several gas deposits have already been found in the northern Adriatic--justify continuation of still more intensive explorations. More funds will be spent on those exploration projects over the next 5 years than on all previous explorations in the Pannonian Basin and the Dinarids.

Among other things this also presupposes the purchase of several floating platforms capable of drilling the seabed to depths of several hundred meters. Two such platforms are to be built in domestic shipyards under an agreement with Jadranbrod. Each such platform will cost about $100 million, and it is indispensable that they be built in our country, but a problem is arising here concerning the importation of equipment and necessary materials, which account for half of the value of the entire project. INA-Naftaplin, the shipbuilding industry and the Executive Council of the Croatian Parliament are making a joint effort to resolve the problem of foreign exchange. The need to purchase [illegible] equipment is also justified by the ever larger domestic production of petroleum and gas, whose present value attains a figure sufficient to purchase 10 platforms, and importation of the necessary equipment and materials would require only one-tenth of that amount.

Present Production Surpassed

Commercial production of gas from the Adriatic seabed is counted on by 1985, when construction of production wells, stable platforms for collection of the gas and underground gas pipelines to the mainland is scheduled.

The gas would then be transported to the gas pipeline in northern Croatia by a pipeline which is to be built in the coastal area and Istria. It is felt that the year 1985 ought to be the turning point for Yugoslav production of petroleum and gas and the petrochemical industry.

Even by 1983, when the Molve II gas field will be rigged up, about 2 billion cubic meters of gas will be produced, and in 1985 INA-Naftaplin's production will amount to about 2.4 billion cubic meters of natural gas and 3.4 million tons of petroleum, most of it from deposits discovered and prepared for exploitation in the recent past, along with fields which will be fitted out for exploitation in that period. Gas production will be appreciably greater if it begins to be extracted from the Adriatic seabed, which has not been taken into account here.

We should emphasize that over the last 5 years several new deposits have been found and rigged out and have contributed to the steady growth of petroleum and gas production. Over the last 5 years INA-Naftaplin has produced 17.3 million tons of crude petroleum and 5.4 billion cubic meters of gas, along with 318,000 tons of liquefied gases. Substantial production is also anticipated this year: INA-Naftaplin will produce 3,061 tons of crude petroleum and 971 million cubic meters of natural gas and 53,300 tons of liquefied gases. Next year production of natural gas is expected to be one-third greater (about 1.4 billion cubic meters), and petroleum production is expected to be up between 2 and 2.5 percent.

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KOSOVO AGRICULTURAL GROWTH RATES FOR 1981-85

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[Text] The draft of the agreement on the bases of the social plan for development of the agroindustrial complex in Kosovo calls for a 6.6-percent annual growth rate over the next 5 years. Agricultural production would grow at an average annual rate of 5.9 percent, the growth rate in the food manufacturing industry would be 10.6 percent, and in the tobacco industry it would be 9.5 percent.

The growth rate of field cropping is projected at 5.5 percent, which is somewhat below the average. But it is also envisaged that the pattern of cultivation would be modified to the advantage of more intensive crops. This means reduced area planted to grains and increased production of industrial crops, fodder and vegetables. Yet this does not mean that grain production will drop. On the contrary, thanks to better organization of production, a higher degree of mechanization and proper soil and crop practices, activation of the hydrosystem and local water storage and organization of the expert and scientific service in 1985, it is expected that 31,000 cars of wheat will be produced, which is almost 10,000 cars more than at present, along with 34,500 cars of corn. Plans also call for a quite considerable increase in the area planted to industrial crops.

The growth of livestock production is planned at a rate of 7.3 percent thanks to changes in breeds, an increased number of livestock and better housing and feeding of livestock. Another factor in the faster growth of livestock production is the building of five cattle operations each with a capacity of 600 head, and then sheep, goat and turkey projects and expansion of present poultry capacities and the building of new ones. The plan also calls for doubling the capacity of the hog farm at Gornje Dobrevo, which would mean 25,000 fattened hogs per year. Faster growth of livestock production in the private sector is planned thanks to the building of about 4,000 miniprojects with an average capacity of 6 dairy cows and the purchase of pedigreed livestock.

More abundant production will, of course, be ensured by increasing the livestock population. By the end of the planning period it is thus envisaged that total meat production will amount to 400 cars, milk production 245 million liters, egg production 260 million, and so on.

The draft of the agreement on the bases of the social plan concerning development of the agroindustrial complex in Kosovo also called for a dynamic growth of fruit production at a rate of 6.3 percent. To that end the plan calls for planting 3,000 hectares of large orchards, equally divided between the socialized and private sectors. Particular attention will be paid in the medium-term period to the production of berries (raspberries, blueberries, blackberries), for which the conditions are very good, especially in the hilly and mountain region.

Very intensive development of viticulture is also planned thanks to higher yields in present vineyards and the planting of new ones. Production in 1985 is projected at 8,400 cars of grapes and nearly 5,000 cars of wine.

Investments amounting to 11,813 million dinars are needed to carry out this ambitious program for development of Kosovo's agroindustrial complex. Of that 7,882 million will go into primary agricultural production and 3,991 million dinars into plants of the food manufacturing industry. The funds are expected to be obtained partially on the basis of local participation and the rest through loans from the International Bank for Development and the Bank of Kosovo, and in the socialized sector they would also be obtained from domestic and foreign commercial credit.

7045
CSO: 2800

KOSOVO NONMETALLIC MINERAL PRODUCTION IN 1981-85 PERIOD

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[Article by Milorad Delibasic: "Stagnation in Spite of Wealth"]

[Text] It is well known that raw materials and processing materials for several industries are furnished through the production and processing of nonmetallic minerals, and there are activities whose production technology all but joins them to the industries for production and processing of nonmetallic minerals (the building materials industry, the heavy chemical industry, and so on). However, in spite of its manifold importance, this industry has been stagnating in Kosovo year after year, and has even been declining, which is certainly having an unfavorable effect on its position and its ability to expand. Though there are known reserves of 17 nonmetallic minerals in Kosovo, only 8 are being exploited. Another unfavorable circumstance is that even the existing production is appreciably below the capabilities of the facilities and the wealth of the raw materials base.

The Difficult Position of Producers

The production and processing of nonmetallic minerals in the province are represented by three work organizations: the Goles and Strezovce magnesite mines and industry and the Karacevo mine and ceramics industry. Goles, the country's oldest magnesite mine, which at one time was well known even outside our country, has been unable to stabilize production for a long time now. In spite of the reconstruction and the building of new facilities (separation plant, rotary furnace for the production of burnt magnesite, an installation for crushing and decarbonization), so that it became the best equipped mine in the country for this type of production, it has been operating at a loss since 1976. Not only has there been an evident decline in the volume of production over this period, but there has also been an appreciable departure from the planned kilowatts. Utilization of the capacity of the mine is very low, and the deposits are in such a condition that new investments are needed every year for prospecting, and this exceeds the technical and financial capabilities of the work organization.

Aside from the steadily declining level of production of magnesite concentrate and burnt magnesite, and then overindebtedness on the basis of capital investments, the large work force (322, or 69 percent, of the 689 mineworkers are assigned to auxiliary jobs, and only 150 are in actual production), the rapid growth of the costs of processing materials and the limiting sales prices, personnel turnover, the turnover of trained personnel in particular, has for years here been an almost insoluble problem that has had an adverse effect on the mine's production and development.

The situation is somewhat more favorable at the Strezovce magnesite mine and industry, but not so much that it can be considered satisfactory. After all, this work organization has also been operating below the margin of profitability, mainly because of underutilization of capacity, the low quality of the magnesite concentrate, frequent delays in production because of inadequate maintenance of equipment and machinery, and so on. The mine has a capacity for producing 300,000 tons of run-of-mine ore per year, 100,000 tons of magnesite concentrate and 45,000 tons of burnt magnesite, but during the last medium-term period only 60 percent of that capacity was utilized.

Exploitation of raw kaolin began in the province in 1960 at the Karacevo mine, which is not far from Kosovska Kamenica, where 12 years ago a factory was built for the manufacture of ceramic wall and floor tiles. Though production of raw kaolin has stayed at the same level for several years now, primarily because of restricted sales opportunities, the mine did operate at a profit during the previous 5-year period. There have been quite a few difficulties in the ceramic tile factory, however, above all concerning purchases of imported processing materials and spare parts.

What Is To Be Done in the Future?

The development plans for this 5-year period at the Goles mine call for stepping up and stabilizing production at a level that provides for profitable operation. Achieving this means mining considerably more ore per year than up to now (170,000 tons), which could yield about 100,000 tons of magnesite concentrate and 39,000 tons of burnt magnesite, which will require prospecting new deposits, and that, of course, necessitates additional investments. At the Strezovce mine they are also planning a considerable increase of production over the next 5 years, counting on construction of new capacities and reconstruction of existing ones and on further geological exploration. Aside from commitment to the work of completing projects already under way (new wall tile factory and plant for production of frit), the working people of the Karacevo mine and ceramic industry at Kosovska Kamenica plan to build several new projects, though it is still uncertain whether the projected investment undertaking can guarantee profitability in production.

Carrying out these plans requires huge financial resources which these work organizations are unable to furnish because of their low rate of capital formation. It is thought by some that the situation in this industry would change for the better if the producers of nonmetallic minerals in the province were to form an association. But the majority feel that the real opportunities for something like that are restricted in the present situation when all three work organizations are operating at a loss, aside from the specific problems which each one has separately. Of course this does not mean that one day the time would not come for formation of an association, but the first need is to rescue the work organizations financially, that is, create the material basis on which their future development policy can be built. At present the way out of the rather problematical situation in production and processing of nonmetallic minerals in Kosovo is probably to be sought in certain noneconomic measures such as: extension or writing off of certain credits and the like. In addition, reliance is also being put on the opportunity of linkage and the pooling of labor and capital between the economy from the advanced regions of our country and the province's associated labor since a large portion of nonmetallic raw materials are sold outside Kosovo. Nor is it an insignificant fact that in the province there are already explored deposits and known reserves of bentonite, dunite, quartzite, marlstone, leucite, asbestos, marble and several other nonmetallic minerals used by various industries, and this offers real opportunities for several of these raw materials to be developed and put into production on the basis of long-term solutions and involvement of associated labor from throughout the entire country.

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